

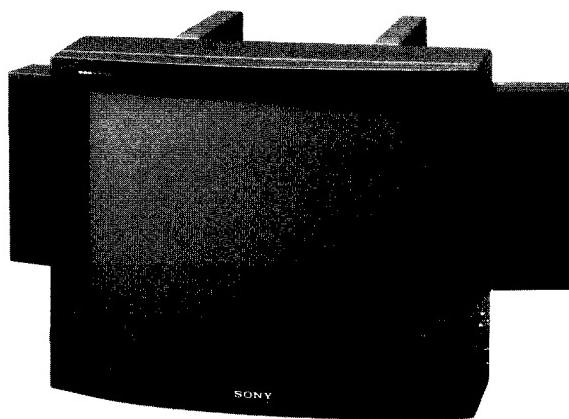
KV-FX29TD

RM-681/SS-XT291

SERVICE MANUAL

AEP Model

Chassis No. SCC-C16A-A



FX CHASSIS

Note: The service manual for RM-681 and SS-XT291 have been issued separately.

MODELS OF THE SAME SERIES

KV-FX29TD	

SPECIFICATIONS

Television system

B/G/H, I, L

Color system

PAL, SECAM, NTSC 4.43, NTSC 3.58

Channel coverage

See "Receivable channels and channel displays"

Italy PAL B/G	AEP PAL B/G	Cable TV (2)	French SECAM-L	PAL-I Ireland	PAL-I UK
A C13	E2 C02	S01 ₣42	2 C02	A C01	21 C21
	12 C12	S05 ₣46	10 C10		
	21 C21	M1 ₣01	21 C21		
	69 C69	M10 ₣10	69 C69		
H C20	Cable TV (1)		French Cable TV		
H1 C11	S1 ₣01	U1 ₣11	B ₣02	H C08	
H2 C12	41 ₣41	U10 ₣20	Q ₣17	J C09	69 C69

Picture tube

Trinitron tube

Approx. 72.4cm (29 inches)

Approx. 68cm picture measured diagonally

110° degree deflection

Input

21-pin connector : CENELEC Standard including RGB input

21-pin connector : S VIDEO

Y : 1Vp-p 3dB 75

C : 0.3Vp-p 3dB 75

— Continued on page 2 —

TRINITRON® COLOR TV
SONY®



MICROFILM

Outputs

Headphone jack : stereo minijack
External speaker terminals : 2-pin DIN
Audio output jacks : phono jack...Output level dependent upon TV settings

Sound output

20W+20W (music power)

Power consumption

180Wh

Dimensions

Approx. 666×532×526.5mm (w/h/d)

Weight

Approx. 52kg

Supplied accessories

RM-681 Remote Commander (1)

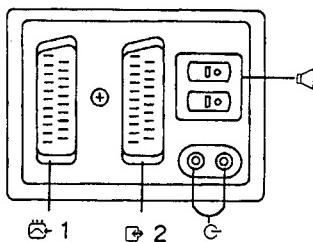
IEC designation R6 batteries (2)

SS-XT291 Detachable Speakers (1 set)

Speaker cord with plug (2)

Design and specifications are subject to change without notice.

21 Pin Connector (① ②)



Pin No	1	2	Signal	Signal level
1	○	○	Audio output B (right)	Standard level : 0.5Vrms Output impedance : Less than 1kohm*
2	○	○	Audio input B (right)	Standard level : 0.5Vrms Input impedance : More than 10kohms*
3	○	○	Audio output A (left)	Standard level : 0.5Vrms Output impedance : Less than 1kohm*
4	○	○	Ground (audio)	
5	○	○	Ground (blue)	
6	○	○	Audio input A (left)	Standard level : 0.5Vrms Input impedance : More than 10kohms*
7	○	●	Blue input	0.7V±3dB, 75ohms, positive
8	○	○	Function select (AV control)	High state (9.5~12 V) : Part mode Low state (0~2 V) : TV mode Input impedance : More than 10kohms Input capacitance : Less than 2 nF
9	○	○	Ground (green)	
10	○	○	Open	
11	○	●	Green	Green signal : 0.7V±3dB, 75ohms, positive
12	○	○	Open	
13	○	○	Ground (red)	
14	○	○	Ground (blanking)	
15	○	-	Red input	0.7V±3dB, 75ohms, positive
	-	○	(S signal) croma input	0.3V±3dB, 75ohms, positive
16	○	●	Blanking input (Y _s signal)	High state (1~3 V) Low state (0~0.4 V) Input impedance : 75ohms
17	○	○	Ground (video output)	
18	○	○	Ground (video input)	
19	○	○	Video output	1V±3dB, 75ohms, positive Sync : 0.3V (-3, +10dB)
20	○	-	Video input	1 V±3dB, 75ohms, positive Sync : 0.3V (-3, +10dB)
	-	○	Video input/Y (S signal)	1 V±3dB, 75ohms, positive Sync : 0.3V (-3, +10dB)
21	○	○	Common ground (plug, shield)	

○ connected

● unconnected (open)

* at 20 Hz~20 kHz

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SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARK  ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

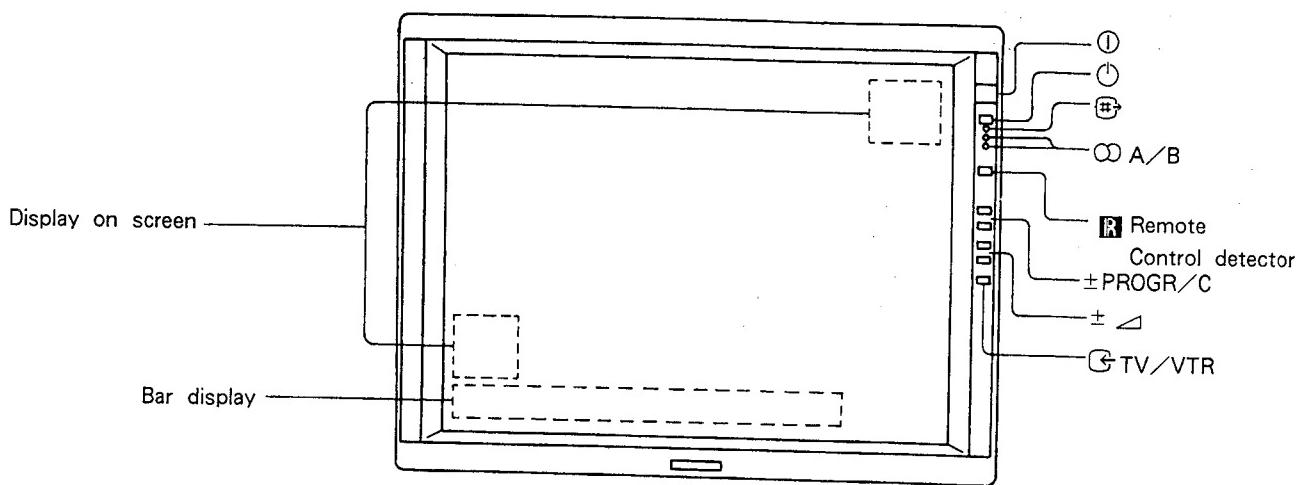
SECTION 1 GENERAL

1-1. FEATURES

- New Microblack Trinitron picture tube for a high resolution and high contrast picture.
- S VIDEO INPUT connector through which Y (luminance) and C (chrominance) signals can be input separately. This reduces interference between the signals and ensures excellent picture quality.

- Multi system PAL (B, G, H, I) SECAM (L) can be received. And NTSC4.43 and 3.58 with video input can be also received.
- Flicker free function produces clear picture.
- Noise Reduction function
- Frequency synthesiser tuning system
- Detachable speakers
- 21-pin connectors allow direct hook-up to up to two VCRs and/or other equipment.
- Teletext adaptor is built-in.

1-2. FUNCTION OF CONTROLS



On the set

On-screen display

Indicates program numbers, input modes ; $\textcircled{1}$, $\textcircled{2}$, $\textcircled{3}$ and $\textcircled{4}$ and picture and sound adjustment items.

Press $\textcircled{+}$ on the Remote Commander to display them on the screen.

Bar display

Indicates the level of the user controls when they are adjusted.

① Power switch

To cut off the mains electricity supply, press this switch. Ensure correct operation by pressing this switch fully.

② standby indicator

Noise reduction indicator

Stereo A/B indicator

R Remote control detector

Point the Remote Commander towards this detector.

PROGR +/− buttons

Use to scan the available channels. And to return to TV mode from standby mode when Remote Commander is not available.

Volume +/− buttons

TV/VIDEO button

Press to select the TV or one of the other input modes.

TV → $\textcircled{1}$ → $\textcircled{2}$ (RGB) → $\textcircled{2}$ → $\textcircled{3}$ (Y/C)

$\textcircled{1}$ Video signal through $\textcircled{1}$ (21-pin connector) can be seen on the screen.

$\textcircled{2}$ RGB signal through $\textcircled{1}$ (21-pin connector) can be seen on the screen. Sharpness is fixed in this case.

$\textcircled{2}$ Video signal through $\textcircled{2}$ (21-pin connector) can be seen on the screen.

$\textcircled{3}$ S video signal through $\textcircled{2}$ (21-pin connector) can be seen on the screen. When you see S video, make sure that the set is in the S video mode.

S video input

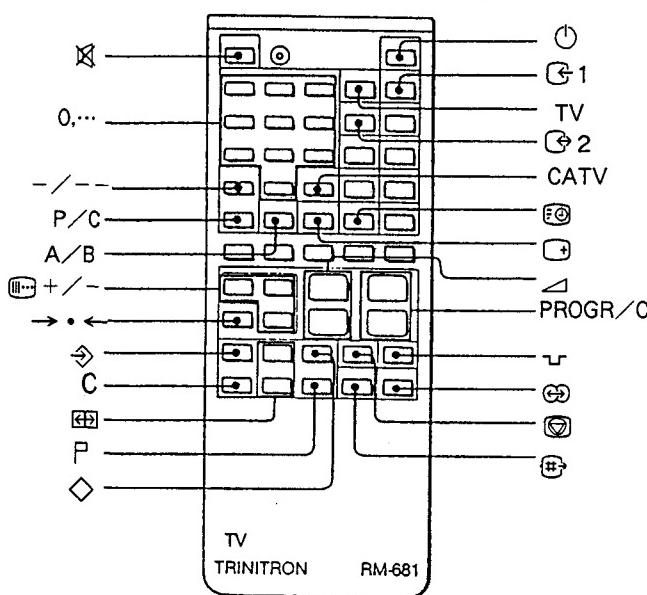
Video signals may be separated into Y (luminance) and C (chrominance) signals.

Usually these two signals are combined in a VTR and output as one signal, and supplied to a TV. Separation of the Y and C signals prevent them from interfering with one another, thereby improving picture quality. This set is equipped with an S video input jack through which these separated signals can be input directly.

Connect the S video output jack on the VTR to the S video input on this set.

Headphones jack (stereo minijack)

(KV-FX29TA, FX29TD RM-681)



On the Remote Commander

mute button

Use to mute the sound.

0,..., 9, buttons

Use to select a program number.

button

Use to select a program number over 9.
To select 23, press , then 2 and 3.

CATV button

Use to select CATV channels.

P/C (program/channel) button

Use to select the channel mode or to return to the program mode.

A/B bilingual button

Press to select channel A (usually the local language) or B (usually the original language) of a bilingual program. Both indicators light up if a stereo program is received.

On-screen display button

Press to make the display appear on the screen. And again to make it disappear.

standby button

Press to turn the set into the standby mode. Use this facility to turn off the set for short periods of time. To return to TV mode, press TV or the program number on the Remote Commander; there will be a slight delay before the picture is restored.

TV button

Press to change to TV mode from standby, video input or teletext modes.

1 input button

Press to view the input picture coming in through the connector.

Each time this button is pressed, and (RGB) will appear alternately.

Press TV or the program number to return to the TV mode.

2 input button

Press to view the input picture coming in through the connector. and (Y/C) will appear alternately.

Press TV or the program number to return to the TV mode.

Time button

In TV mode, press to display the preset time on the screen, and again to make it disappear. This function is available only when the teletext service is broadcast in the selected channel.

+/-, picture and sound adjustment buttons.

There are two ways to use these buttons.

1. When watching a TV program

Press repeatedly until the on-screen display of the required item appears, i.e. picture, color, brightness, hue, sharpness, bass, treble or balance.

Adjust by pressing + or -.

2. When presetting TV channels and programs

For details please see "To preset channels".

→ • ← reset button

Press to reset the user controls to the factory-set levels.

Preset button

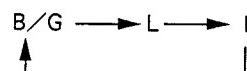
Used when presetting channels.

C clear button

Used when presetting a program to be skipped.

P TV system switch button

Press to select the TV system.



◊ store button

Used when presetting channels.

Volume +/− buttons

PROGR/C +/− buttons

Used to scan the available programs or channels.

⊞ space sound button

Press to obtain special acoustic effects. Press again to restore normal sound. (The indicator on the screen is .)

⊞ noise reduction button

Press to reduce noise on the picture.
The indicator on the set lights up.

loudness button

Press to emphasize high and low tones. Press again to restore the normal sound. (The indicator on the screen is 

freeze button

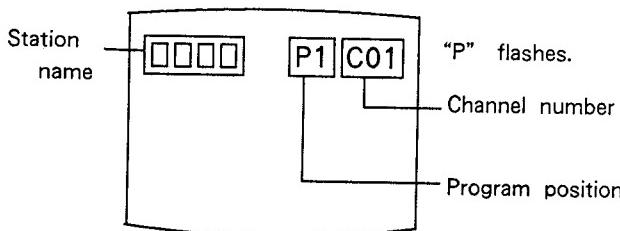
Press to view a still picture. Press again to restore normal picture.

Note Buttons not referred to in this manual do not operate.

1-3. TO PRESET CHANNELS

Use the buttons on the Remote Commander.

1. Press  (preset).
2. Press a number button on the Remote Commander to select a desired program position.



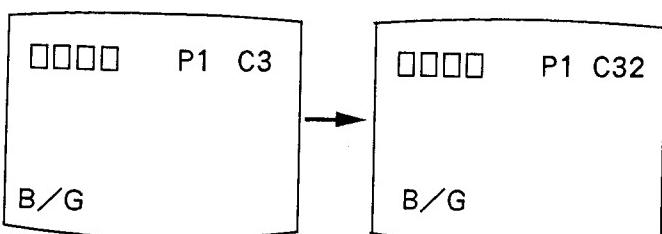
3. Press P to select the appropriate TV system. TV system display changes sequentially.

B/G → L → I
 B/G : France
 I : UK/Ireland
 B/G : Other west European countries

4. Press P/C. C starts flashing, then press the desired channel number e.g.

To tune in channel number 32, press 3 and then 2. (To tune in channel number 4, press 0 and then 4.)

The display will be as follows.



If you want to name the station,

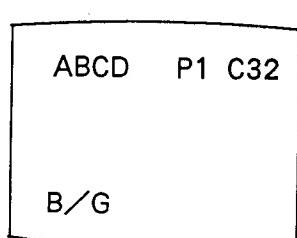
Press . The first column of the station name flashes.

Press  +/− to select a desired character.

Press  again to make the second column flash, and select a desired character.

Thus four characters can be displayed as desired.

To make the column blank, leave .



When the last column flashes, press . P starts flashing.

To tune in a higher or lower station, press  +/−. Channel searching starts. Channel number increases or decreases until a TV station is tuned in.

5. Press  to memorize all the station data displayed on the screen.

Then P starts blinking.

If you want to preset more channels, repeat steps 2 to 5.

6. Press .

To skip a position, press C and  in the preset mode. The position is skipped when program +/− button is pressed.

To return to TV mode, press .

1-4. HOW TO SELECT THE DESIRED CHANNEL

There are two ways to select a channel.

To select by appointing a program number

For direct program tuning for the programs under 10, press 0, 1, 2, 3,...9.

For direct program tuning for the program over 9, press  and two number buttons. (e.g.  3 and then 2)

For sequential program up/down tuning, press PROGR/C +/−.

To select by appointing a channel position

Press P/C to change into the channel tuning mode. "C" appears on the screen.

For direct channel tuning for the normal channel, press two number buttons sequentially.
(e.g. for channel 2, press 0 and 2)

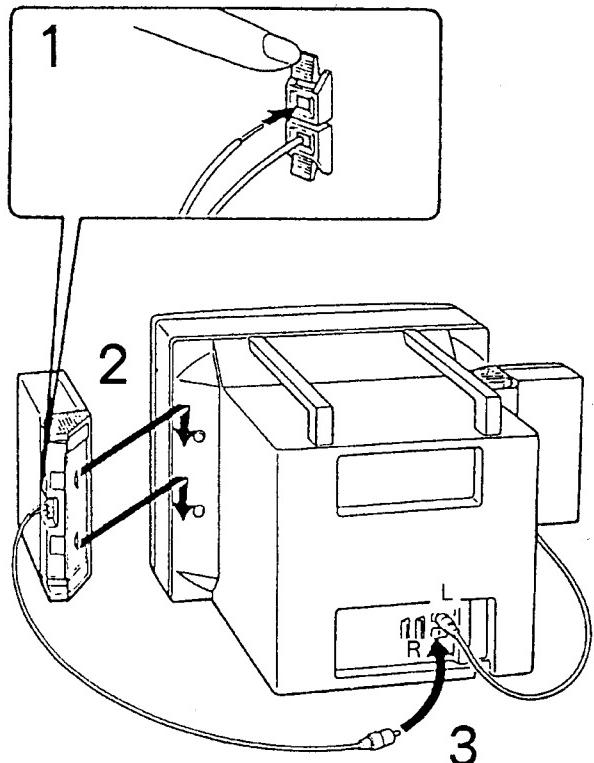
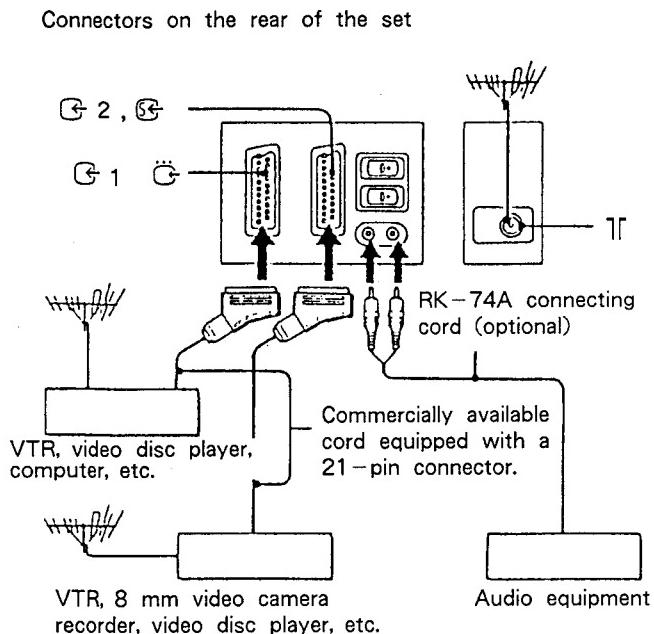
Note

When pressing two number buttons, the second button should be pressed within 5 seconds. otherwise the operation will be cancelled and display will return to the original one.

For sequential channel up/down tuning, press PROGR/C +/−.

1-5. CONNECTING OTHER EQUIPMENT

There are two ways to connect a Video Tape Recorder (VTR).



*Connect S VIDEO output of the VTR, etc. here.

Notes

- Move the VTR away from the TV if the picture or the sound is distorted.
- Only one of the VTRs should be turned on at one time.
- It is also possible to connect a VTR using the **4** socket.
- Computers cannot be connected to **2**.

S video input

Video signals may be separated into Y (luminance) and C (chrominance) signals. Usually these two signals are combined in a VTR and output as one signal, and supplied to a TV. Separation of the Y and C signals prevent them from interfering with one another, thereby improving picture quality.

This set is equipped with an S video input jack through which these separated signals can be input directly.

Connect the S video output jack on the VTR to the S video input on this set.

1-6. HOW TO ATTACH THE SPEAKERS

- Connect the black cord to the black button on the speaker.
Connect the white cord to the red button hole.
- Attach the right and left speakers to the set.
- Connect the left speaker cord to **L/G/S** terminal and the right speaker cord to **R/D/D** terminal on the rear of the set.

1-7. VIEWING TELETEXT

To view the teletext service, use the Remote Commander. The buttons for teletext operation are indicated in green.

Operation

1. Select the TV channel for the desired teletext service.
When the signal is weak, teletext errors may often occur.
2. Press (TEXT/MIX) to display the teletext service.
3. Key in the three digits of the desired page using the number buttons. If an error is made, complete the three-digit sequence by keying in any digit. Then re-enter the correct page number. The requested teletext page is displayed.

To return to the TV mode, press TV on the Remote Commander.

The teletext service can be displayed directly from the standby mode by pressing .

To receive the teletext service of a different TV channel.

1. Press TV to return to the TV mode.
2. Select the desired TV channel.
3. Press .

To request the index page

Press (INDEX). If the necessary signal is not being broadcast, page 100 is displayed.

To access the next or preceding page.

Press (PAGE+) or (PAGE-).

To superimpose the teletext display on the picture

Press twice from TV mode.

Press again to return to the TEXT display.

To suppress the teletext display so that the TV picture is displayed.

Press (TEXT CL). This button can be operated from both the TEXT and MIX displays.

To prevent a teletext page from being updated/changed.

Press (HOLD). The HOLD symbol appears on the screen.

To resume normal teletext reception, press .

To enlarge the teletext display

Press once to enlarge the upper half of the display; press again to enlarge the lower half of the display. And press again to return to the normal display.

To reveal concealed information such as answers to a quiz

Press .

Press again to conceal the answers.

To watch the TV program while waiting for a requested page to be displayed

1. Request the new page.
2. Press to watch the TV program. The requested page number and other data appears at the top of the screen while the page number is being searched for. When the requested page has been captured, the page number on the screen and the other data disappears.

P101

(TV picture)

To have a requested page displayed at a pre-determined time

1. Request a time coded page (e. g. alarm page).
2. Press (TP ON). "T****" will appear at the bottom of the screen.

T****

3. Enter your request time with the number buttons, using four digits.

For example, 0730.

T0730

To watch the TV program until the requested time, press .

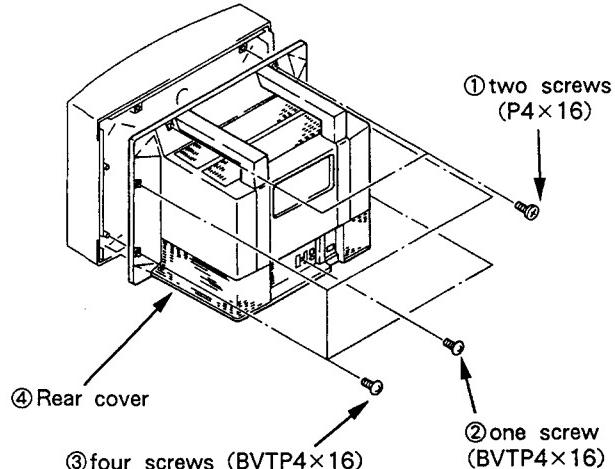
At the requested time, the page number will be displayed at the bottom of the screen.

To view this page, press .

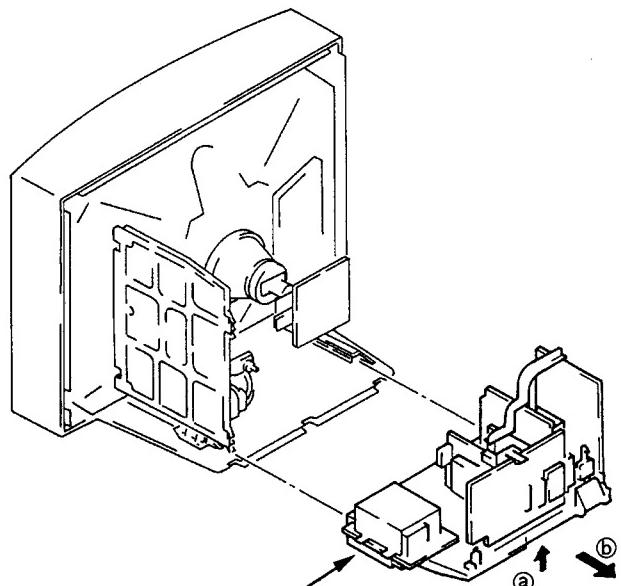
To cancel the request, first ensure that the teletext page is displayed, then press (TP OFF).

SECTION 2 DISASSEMBLY

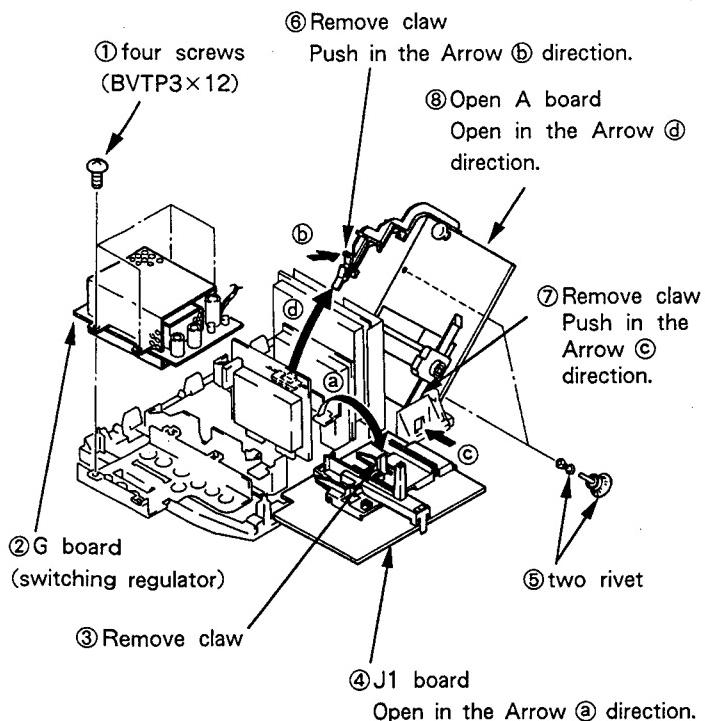
2-1. REAR COVER REMOVAL



2-2. CHASSIS ASSY REMOVAL



2-3. G BOARD (SWITCHING REGULATOR) REMOVAL AND J1, A BOARDS OPENING



2-4. B1, Q AND V BOARDS REMOVAL

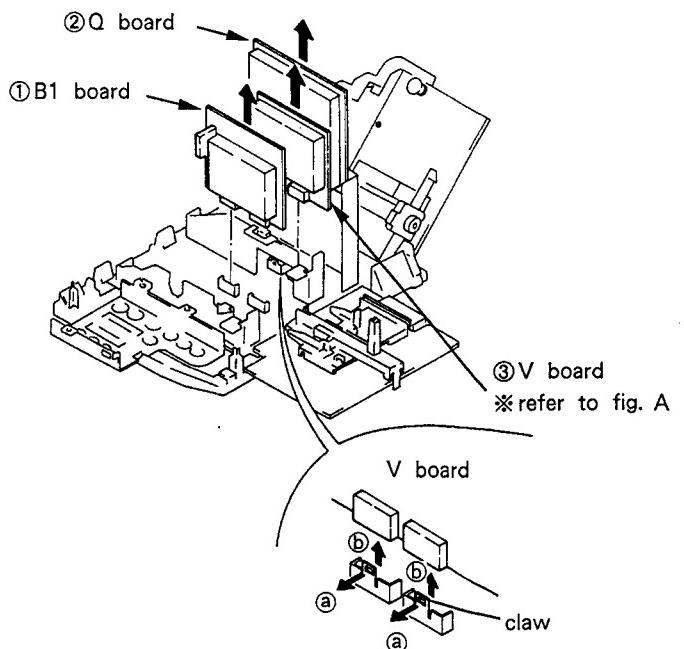
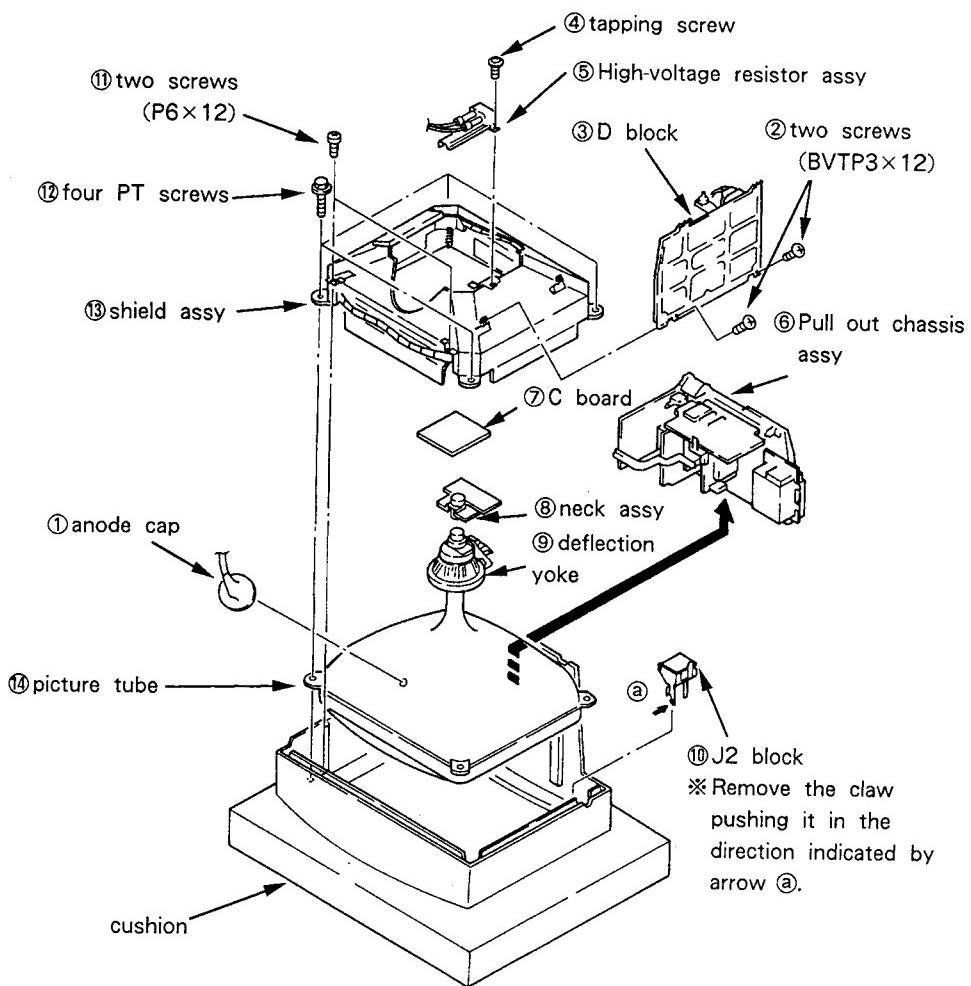


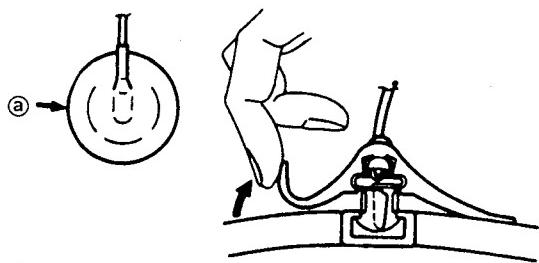
Fig. A
④ Pull out V board after removing the two claws on the connector holding V board in place in the direction indicated by arrow ④.

※ The operation must be performed after removal of board B1.

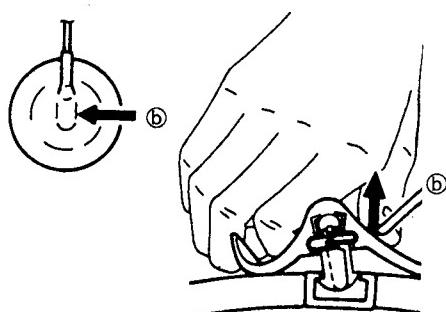
2-5. PICTURE TUBE REMOVAL



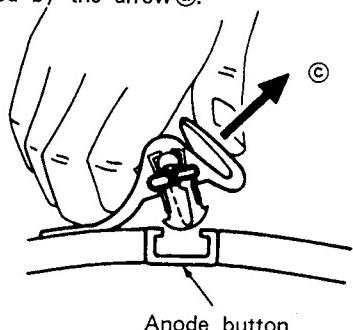
● Removing Procedures



- ① Turn up one side of the rubber cap in the direction indicated by the arrow ④.

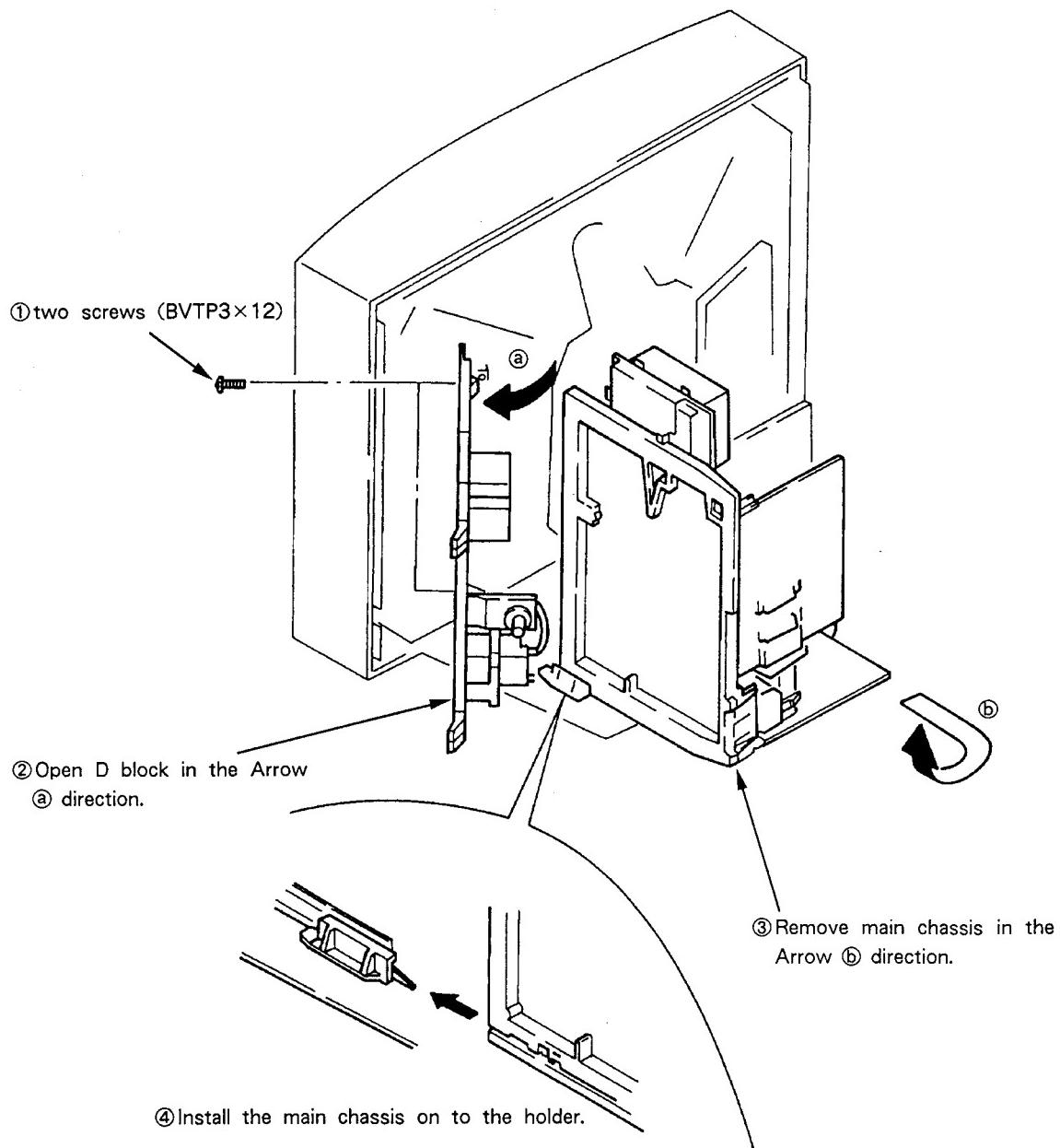


- ② Using a thumb, pull up the rubber cap firmly in the direction indicated by the arrow ⑤.



- ③ When one side of the rubber cap is separated from the anode button, the anode cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow ⑥.

2-6. SERVICE POSITION



SECTION 3 SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

The control and switch below should be set as follows unless otherwise noted :

- CONTRAST control 80% (or Normal by Commander)
 ☀ BRIGHTNESS control 50%

Perform the adjustments in order as follows :

- Beam Landing
- Convergence
- Focus
- White Balance

Note : Test Equipment Required.

- Color Bar / Pattern Generator
- Degausser
- DC Power Supply
- Digital multimeter
- Oscilloscope

Preparation

- Set the side of the unit with the PICTURE TUBE so that it faces east or west in order to reduce the influence of external magnetic force.
- Turn the power switch for the unit ON and erase the magnetic force using a degausser.

3-1. BEAM LANDING

- Input a raster signal with the pattern generator.
 CONTRAST }
 BRIGHTNESS } normal
- Turn the raster signal of the pattern generator to red.
- Move the deflection yoke backward, and adjust with the purity control so that red is in the center and blue and green are at the sides, evenly. (Fig. 3-1 — 3-3)
- Move the deflection yoke forward, and adjust so that the entire screen becomes red. (Fig. 3-1)
- Switch over the raster signal to blue and green and confirm the condition.
- When the position of the deflection yoke is determined, tighten it with a deflection yoke mounting screw.
- When landing at the corners is not right, adjust by using the magnet. (Fig. 3-4)

Fig. 3-2

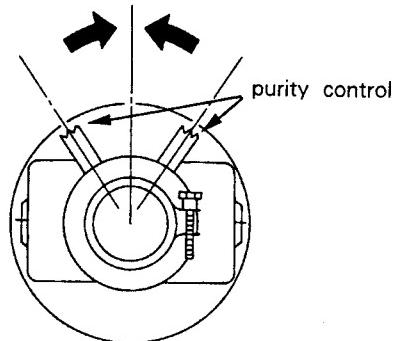


Fig. 3-3

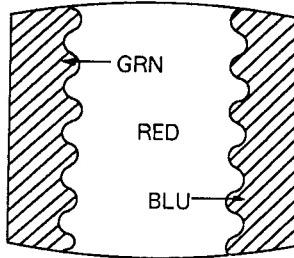


Fig. 3-4

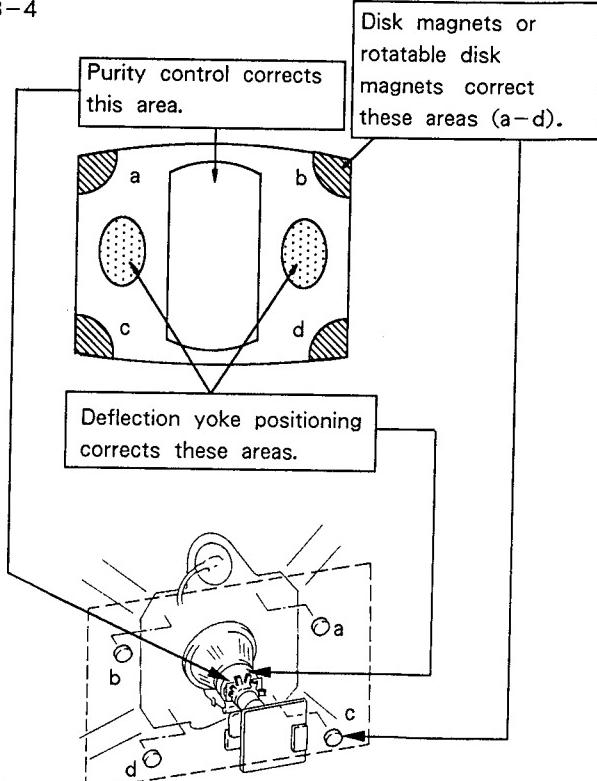
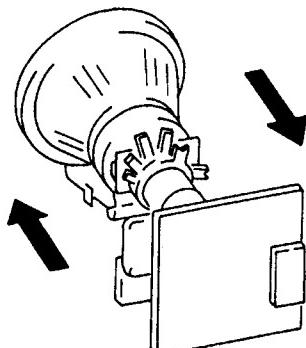


Fig. 3-1

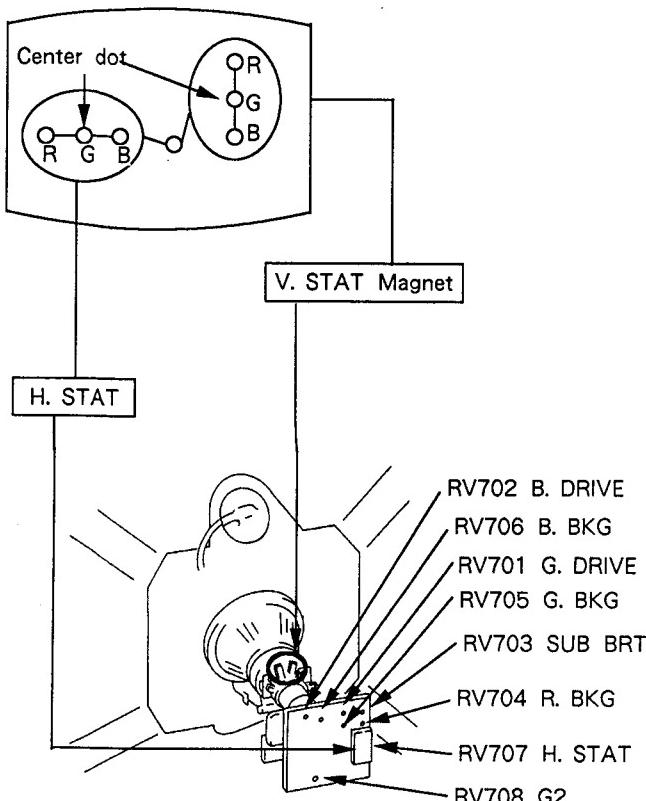


3-2. CONVERGENCE

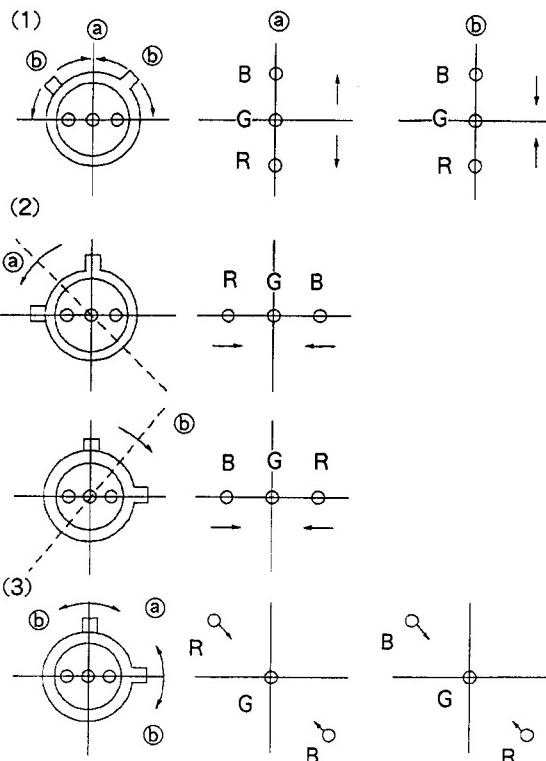
Preparation :

- Before starting, perform FOCUS, H. SIZE and V. SIZE adjustments.
- Set BRIGHTNESS control to minimum.
- Feed in the dot pattern.

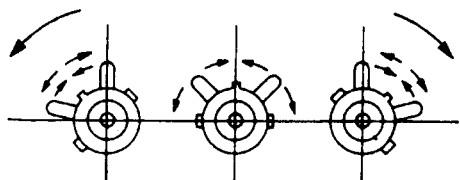
(1) Horizontal and Vertical Static Convergence



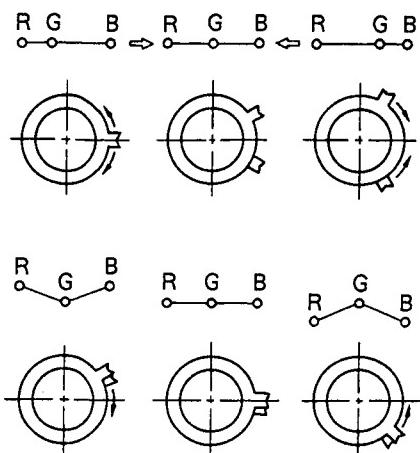
4. When the V. STAT magnet is moved in the direction of arrow ④ and ⑤, red, green and blue dots move as shown below.



1. Adjust H. STAT VR to coincide red, green and blue dots on the center of screen.(Horizontal movement)
2. Adjust V. STAT magnet to coincide red, green and blue dots on the center of screen.(Vertical movement)
3. If the red, green and blue dots do not coincide on the center of screen with H. STAT VR, perform horizontal convergence adjustment using H. STAT VR and V. STAT magnet as shown below. (In this case, H. STAT VR and V. STAT magnet effect each other.)
- Tilt the V. STAT magnet and adjust static convergence to open or close the V. STAT magnet.

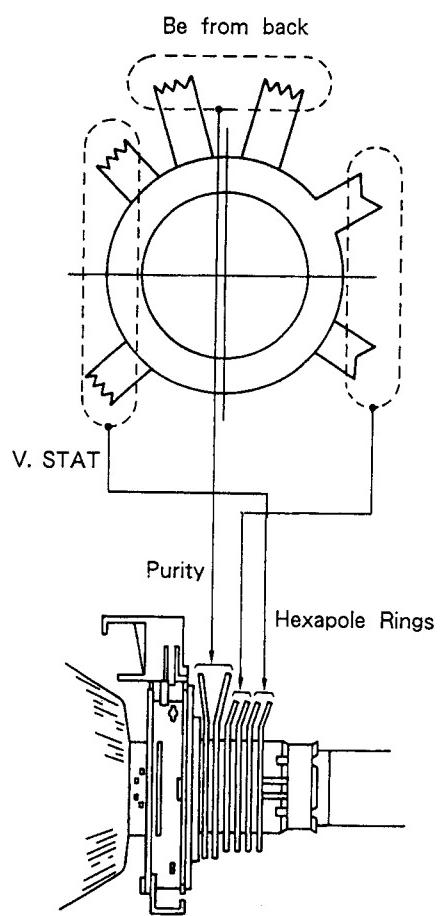


● Operation of Hexapole Ringed Magnet



The respective dot operations resulting from the operation of each magnet are not completely independent, so be sure to perform adjustment while tracking.

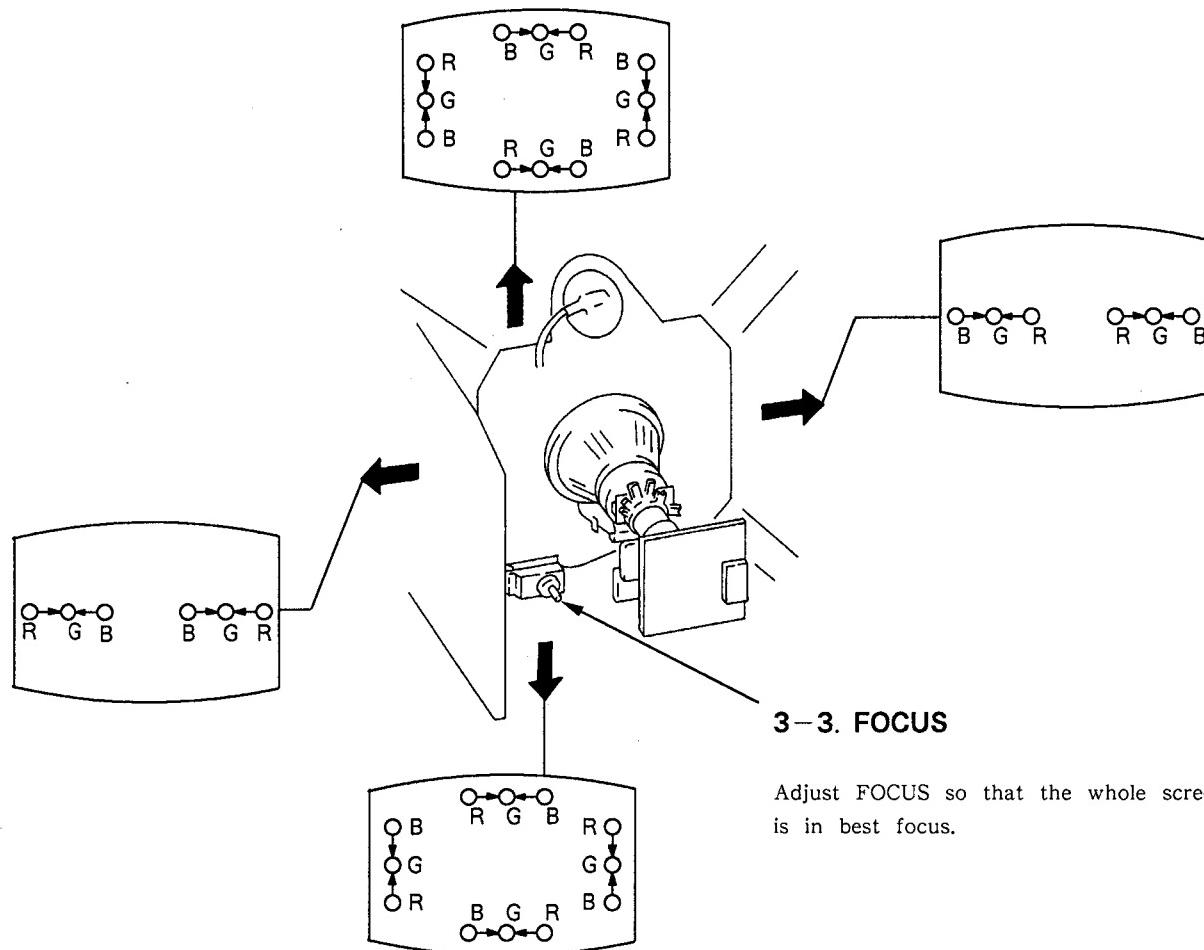
Use the H. STAT VR to adjust the red, green, and blue dots so they coincide at the center of screen (by moving the dots in the horizontal direction).



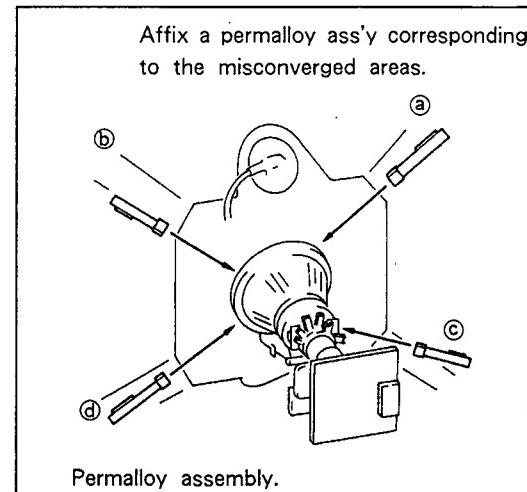
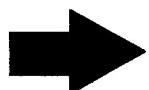
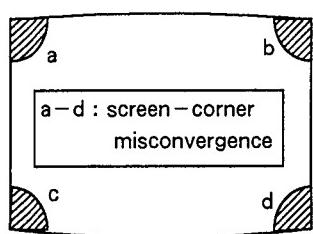
(2) Dynamic Convergence Adjustment

Preparation :

- Before starting, perform Horizontal and Vertical Static Convergence Adjustment..
- 1. Slightly loosen deflection yoke screw.
- 2. Remove deflection yoke spacers.
- 3. Move the deflection yoke for best convergence as shown below.
- 4. Tighten the deflection yoke screw.
- 5. Install the deflection yoke spacers.



(3) Screen - corner Convergence



3-4. WHITE BALANCE

(Screen (G2) Setting)

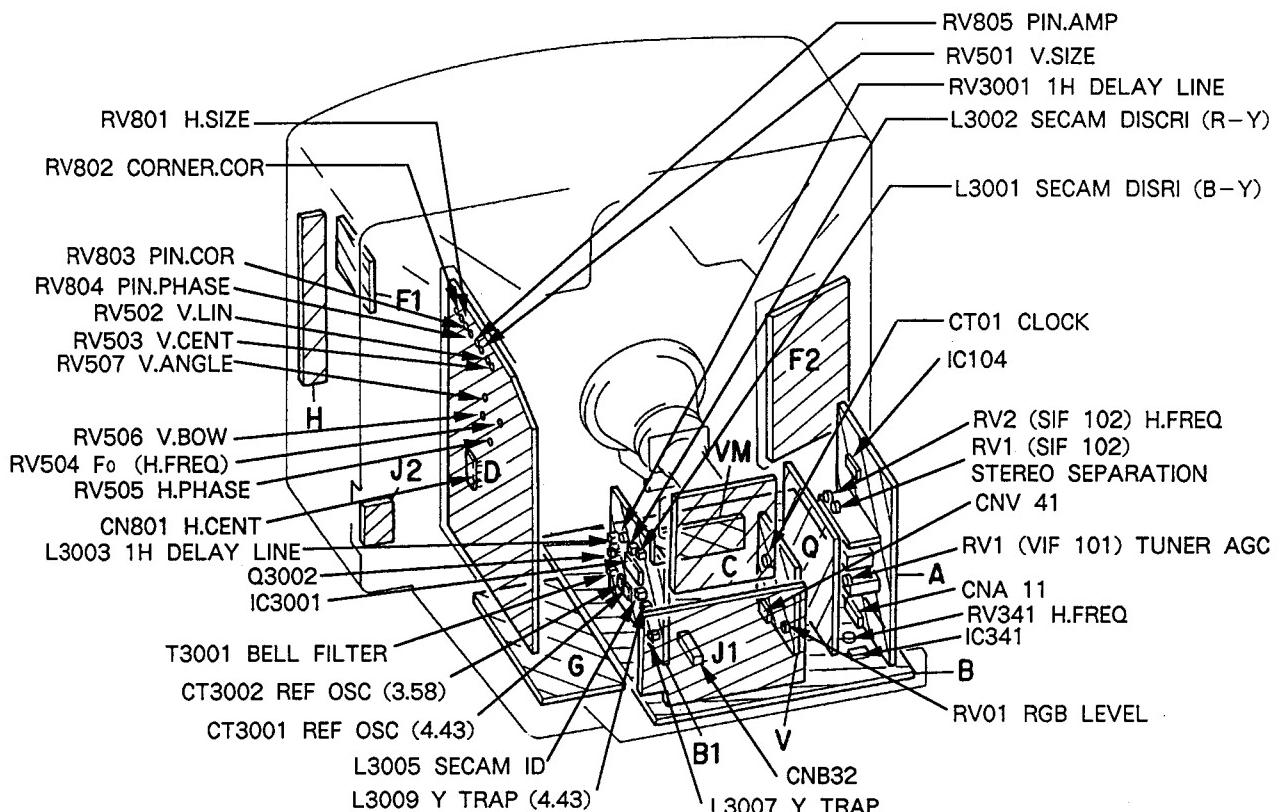
1. Input dot signals.
2. Set the picture BRIGHTNESS control to the minimum level.
3. Apply 170 V dc to the cathodes of R, G, and B from an external power source.
4. While watching the picture, adjust the G2 volume (RV708) immediately before the fly-back line disappears.

(White Balance Adjustment)

1. Input all-white signals.
2. Adjust the BRIGHTNESS and COLOR controls to the standard level.
3. Adjust the highlight W/B balance by turning the RV702 (B. DRIVE) and RV701 (G DRIVE). Also, adjust the cut-off W/B by turning RV706 (B-BKG), RV705 (G-BKG) and RV704 (R-BKG). Note that these two balances must be adjusted during tracking.

In the following adjustments, the CONTRAST, COLOR and BRIGHTNESS controls are set to normal unless otherwise specified.

SECTION 4 CIRCUIT ADJUSTMENTS



4-1. A BOARD ADJUSTMENTS

TUNER AGC Adjustment VIF101 (IFG389FS) RV1

1. Tune in an off-air signal.
2. Adjust RV1 so that snow-noise and cross-modulation just disappear from the picture.

**STEREO SEPARATION Adjustment SIF102 (IFG5.5S)
RV1**

1. Input stereo signal (L-CH 1kHz, R-CH 400Hz)
2. Check the stereo indicator.
3. Connect an oscilloscope to the pin ① (L) of CNA11 through band pass filter of 1kHz.
4. Adjust RV1 so that 1kHz voltage goes down to the minimum.

H. FREQ. Adjustment SIF102 (IFG5.5S) RV2

1. Input PAL COLOR pattern.
2. Short circuit between pin ⑫ of IC4 (TDA2595) and ground.
3. Connect a frequency counter to the pin ⑥ through a probe of 10 : 1.
4. Adjust RV2 so that H. frequency becomes $15.625 \pm 50\text{Hz}$, $15.625 \pm 5\text{Hz}$.

4-2. B BOARD ADJUSTMENTS

H. FREQ Adjustment (RV341)

1. Input a PAL COLOR BAR pattern.
2. Connect pin ⑫ of IC341 to the ground.
3. Connect the frequency counter to pin ⑥ using the 10 : 1 ratio probe.
4. Adjust RV341 so that frequency H becomes $15.625 \pm 50\text{Hz}$.

4-3. B1 BOARD ADJUSTMENTS

REF OSC Adjustment (CT3001, 4.43 MHz)

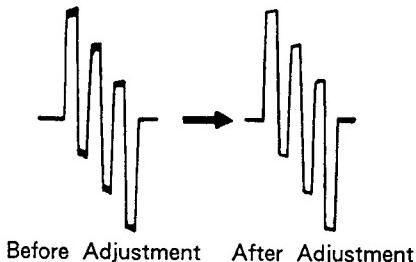
1. Input a PAL COLOR BAR pattern.
2. Short circuit between pin ⑪ of IC3001 and ground.
3. Adjust CT3001 to obtain color synchronization.
4. Remove the jumper wire from IC3001.

REF OSC Adjustment (CT3002, 3.58 MHz)

1. Input NTSC3.58 COLOR BAR signal.
2. Short-circuit pin ⑪ of IC3001 and the ground.
3. Adjust CT3002 to obtain color synchronization.
4. Remove the jumper of IC3001.

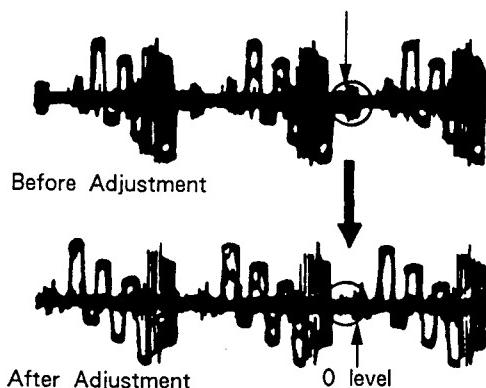
1H DELAY LINE Adjustment (L3003, RV3001)

1. Input a PAL COLOR BAR pattern.
2. Connect the oscilloscope to pin ③ (B-Y) of IC3001 and observe the waveform of the H block on the oscilloscope.
3. Adjust L3003 to minimize the double waveform outline.



4. Input a PAL TEST COLOR BAR pattern.
5. Rotate the RV3001 and adjust till the ANT PAL part of the waveform matches the 0 level.

This part matches the 0 level.



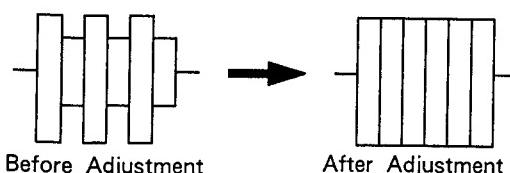
6. L3003 and RV3001 affect each other, so repeat till the conditions of both are met.

SECAM ID Adjustment (L3005)

1. Input SECAM COLOR BAR signal.
2. Connect a Digital Multi - meter at pin ② of IC3001.
3. Adjust L3005 so that the indicator goes up to the maximum.

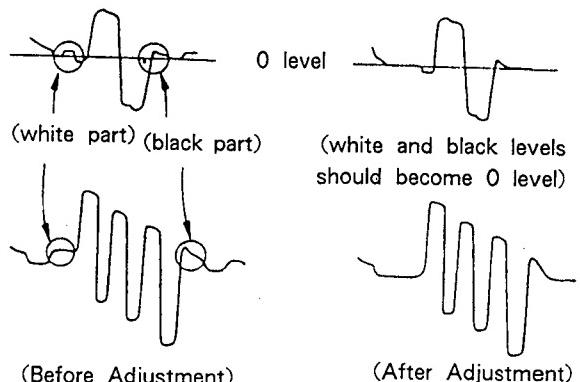
BELL FILTER Adjustment (T3001)

1. Input SECAM COLOR BAR pattern.
2. Connect an oscilloscope to the Q3002 emitter.
3. Adjust T3001 so that the waveform becomes flat.



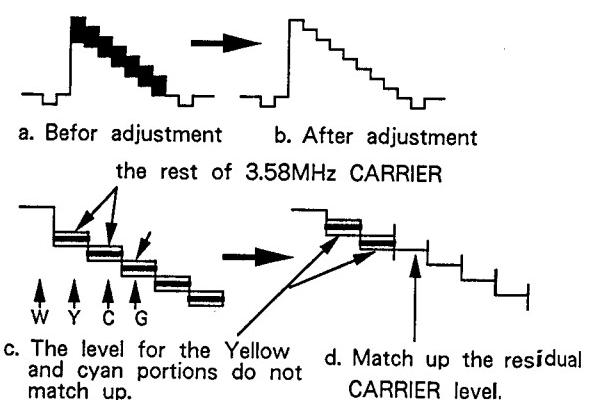
SECAM DISCRI Adjustment (L3002 (R-Y), L3001 (B-Y))

1. Input SECAM COLOR BAR pattern.
2. Connect an oscilloscope at pin ① of IC3001.
3. Adjust L3002 (R-Y) so that white and black part of the waveform of pin ① becomes 0 level.
4. Connect an oscilloscope at pin ③ of IC3001.
5. Adjust L3001 (B-Y) so that white and black part of the waveform of pin ③ becomes 0 level.



Y TRAP (L3007 4.25 MHz, L3009 4.43 MHz)

1. Input PAL COLOR BAR pattern.
2. Connect the oscilloscope to the Y-OUT terminal of CNB32 pin③ to display the waveform for the H portion.
3. Adjust L3009 to minimize the CARRIER level.
4. Convert the input signal into NTSC COLOR BAR pattern.
5. Cancel the forced PAL MODE and set the forced NTSC MODE.
6. Adjust L3007 while observing if the signal portions for the CARRIER level for DR (3.58 MHz).



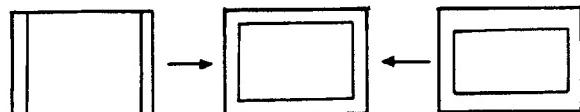
4-4. D BOARD ADJUSTMENTS

H. FREQ Adjustment (RV504)

1. Input PAL COLOR BAR.
2. Connect 100/ $\sqrt{16}$ chemical condenser between pin ① of IC501 and the GND.
3. Connect the frequency counter probe to C824.
4. Adjust RV504 so that ± 31.25 Hz is obtained for 2H the frequency.

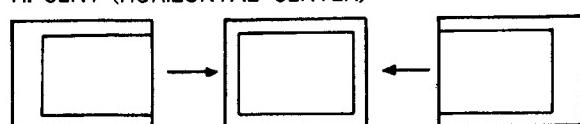
RV501

V. SIZE (VERTICAL SIZE)



CN801

H. CENT (HORIZONTAL CENTER)



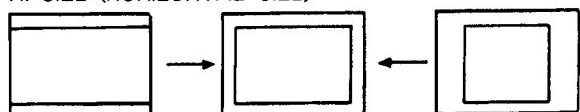
RV505

H. PHASE (HORIZONTAL PHASE)



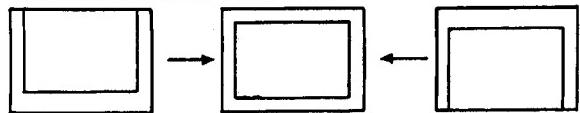
RV801

H. SIZE (HORIZONTAL SIZE)



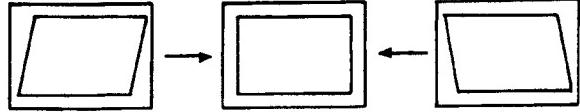
RV503

V. CENT (VERTICAL CENTER)



RV507

V. ANGLE (VERTICAL ANGLE)



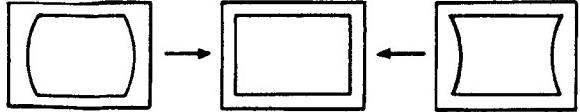
RV506

V. BOW (VERTICAL BOW)



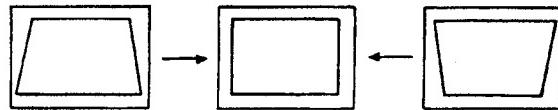
RV805

PIN AMP (PINCUSHION AMPLIFIER)



RV804

PIN PHASE (PINCUSHION PHASE)



RV803

PIN COR (PINCUSHION CORRECT)



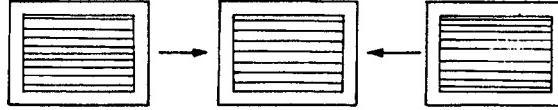
RV802

CORNER. COR (CORNER CORRECT)



RV502

V. LIN (VERTICAL LINEARITY)



4-5. Q BOARD ADJUSTMENT

H. FREQ Adjustment

1. Input PAL COLOR BAR pattern.
2. Connect pin ⑭ of CNQ44 (H SYNC) to the GND.
3. Turn the core of L1312 to adjust the position where the screen flows slowly.



4-6. V BOARD ADJUSTMENTS

Clock Adjustment (CT01)

1. Disconnect the pins ② and ③ of CNV01.
2. Set up the TELE TEXT mode.
3. Adjust CT01 to stop pictures from scrolling.

RGB Level Adjustment (RV01)

1. Set PICTURE to maximum.
2. Adjust RV01 till the RGB output becomes maximum.

4-7. SUB ADJUSTMENTS

SUB BRIGHTNESS Adjustment

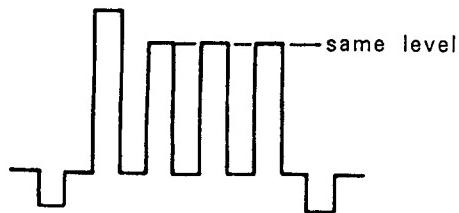
1. Receive and display a TEST COLOR BAR pattern.
2. Push $\rightarrow \leftarrow$ on the remote commander to invoke the normal state.
3. Reduce the CONTRAST to the minimum level.
4. Adjust the SUB BRIGHTNESS RV703 until the 0 IRE of the gray scale becomes completely cut off, and the 20 IRE becomes barely luminous.

Where no TEST COLOR BAR pattern is available,

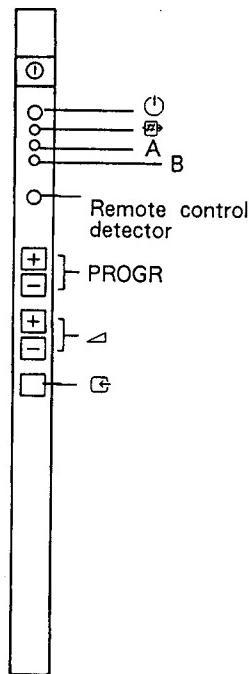
1. Display a COLOR BAR pattern.
2. Push $\rightarrow \leftarrow$ on the remote commander to invoke the normal state.
3. Set the PICTURE and COLOR to minimum.
4. 20 IRE is close to blue, so adjust the SUB BRIGHTNESS RV703 till blue is faintly luminous.

SUB COLOR Adjustment

1. Display a COLOR BAR pattern.
2. Push $\rightarrow \leftarrow$ on the remote commander to invoke the normal state.
3. Turn off the power supply.
4. Turn on the power supply while pushing the VOL + and VOL - buttons on the unit.
5. Adjust the COLOR control until the B out (pin ④ of CNC33 connector on C board) waveform becomes as shown below.

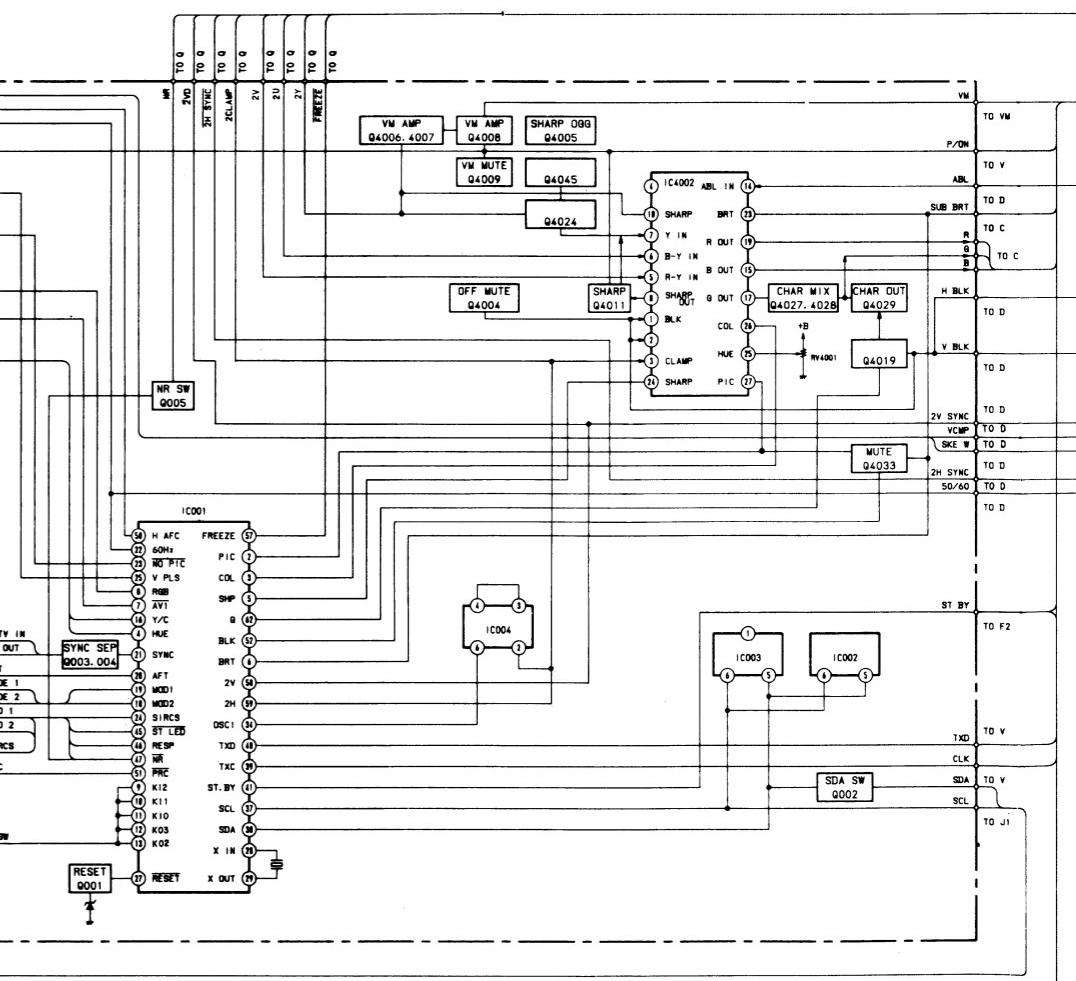
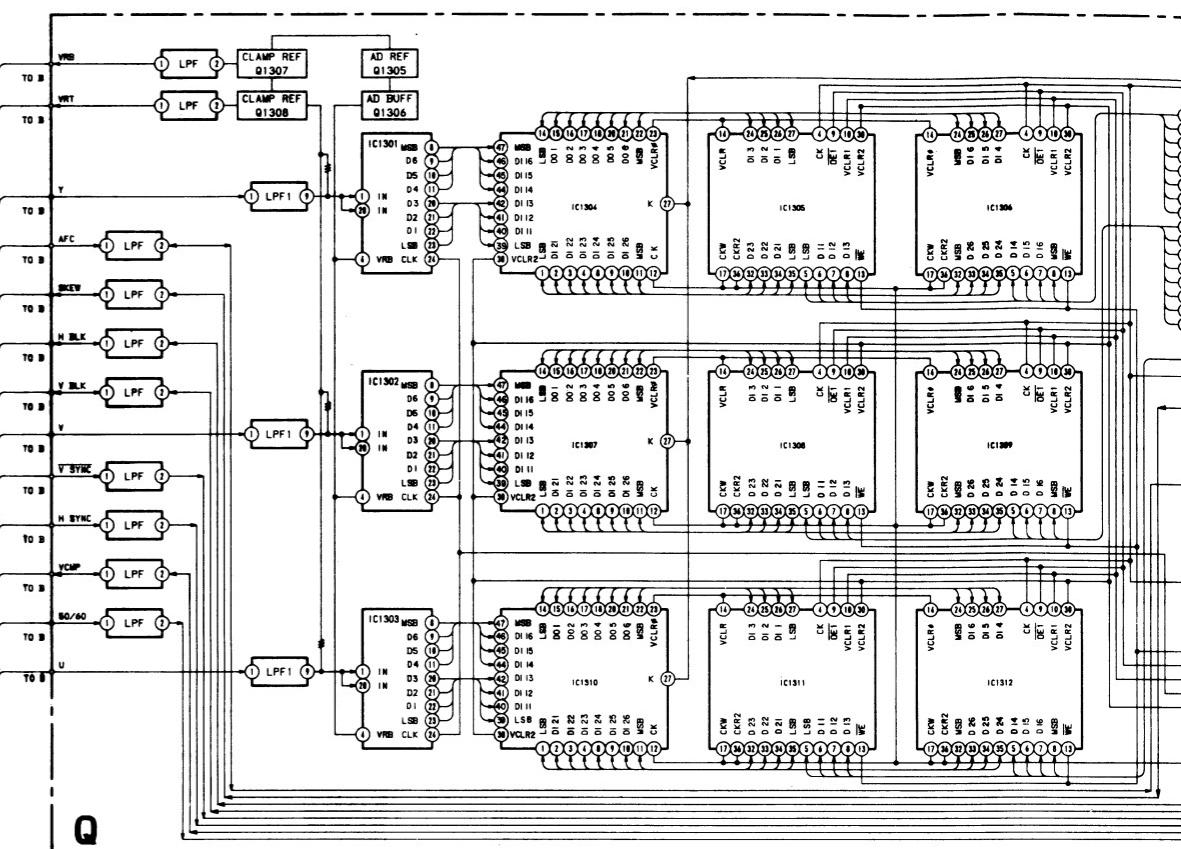
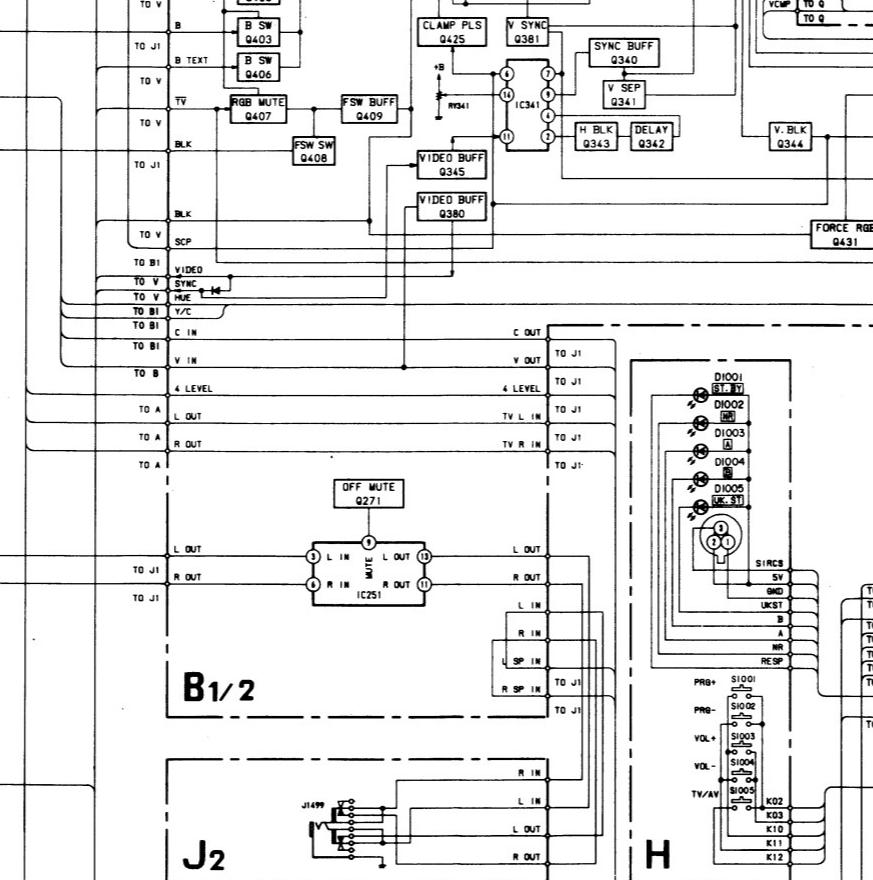
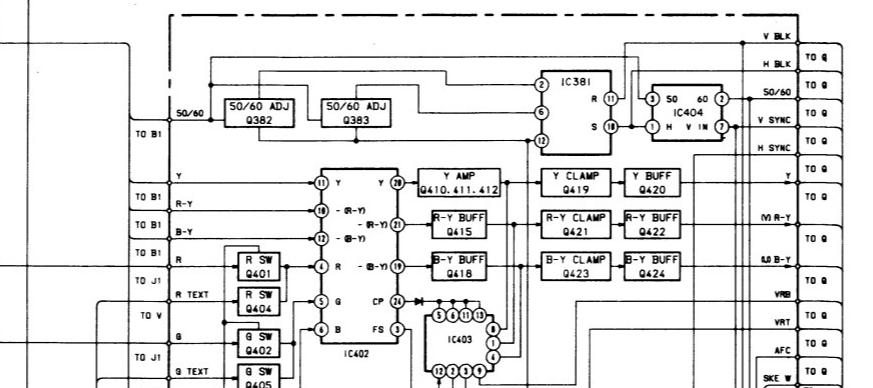
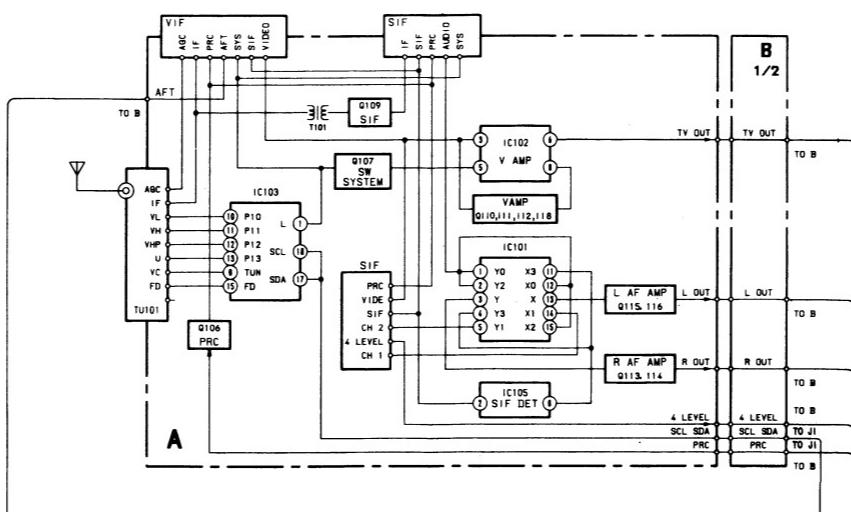
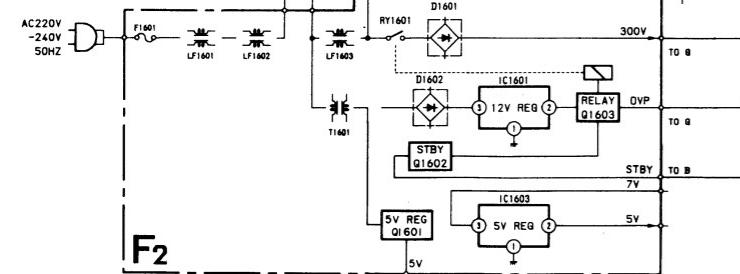
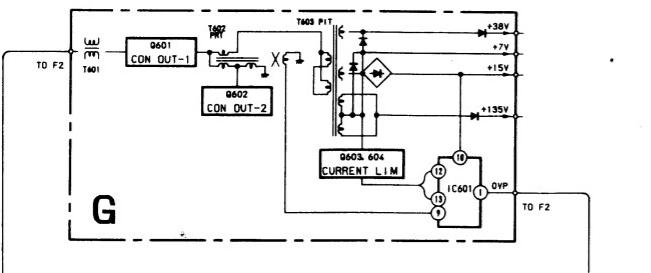
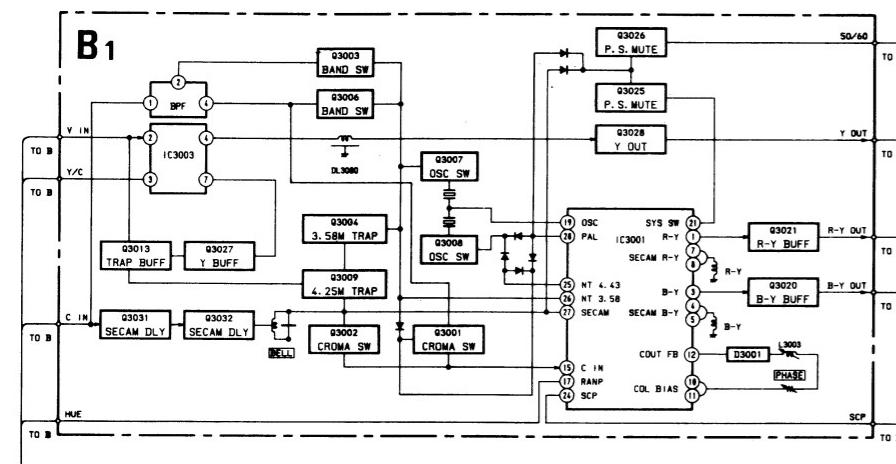
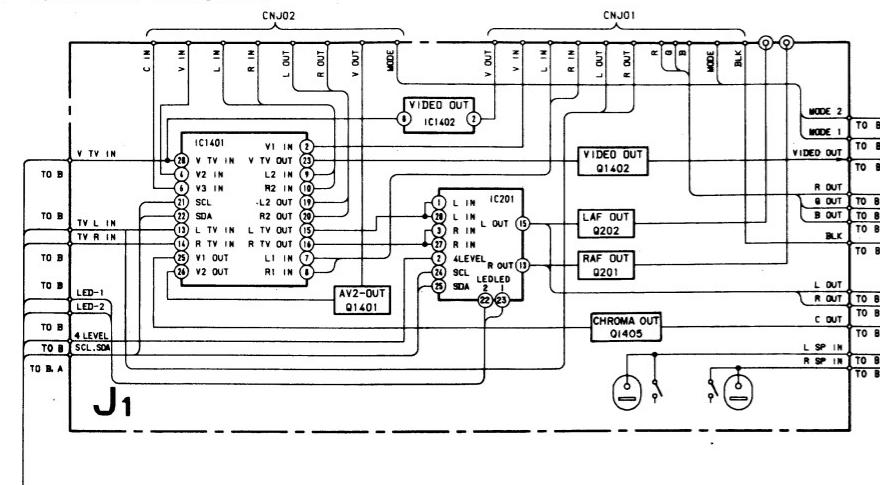


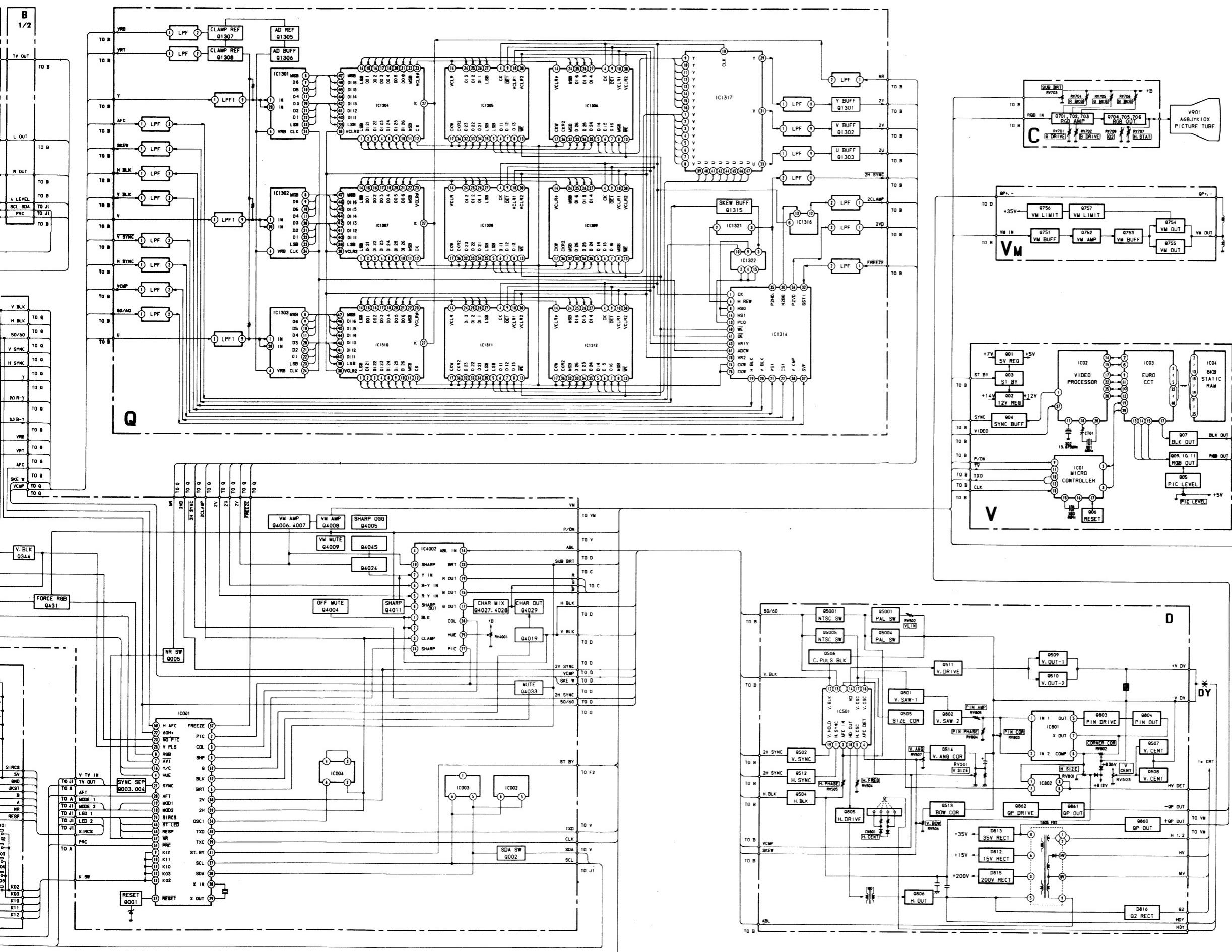
6. Push the STORE button on the remote commander. (SUB mode is cleared.)
- * When Step 4 is executed correctly, SUB (SUB mode) is displayed at the upper right of the display. As S (SUB mode) is displayed only for 30 seconds, perform the adjustment within 30 seconds, or repeat from Step 4.

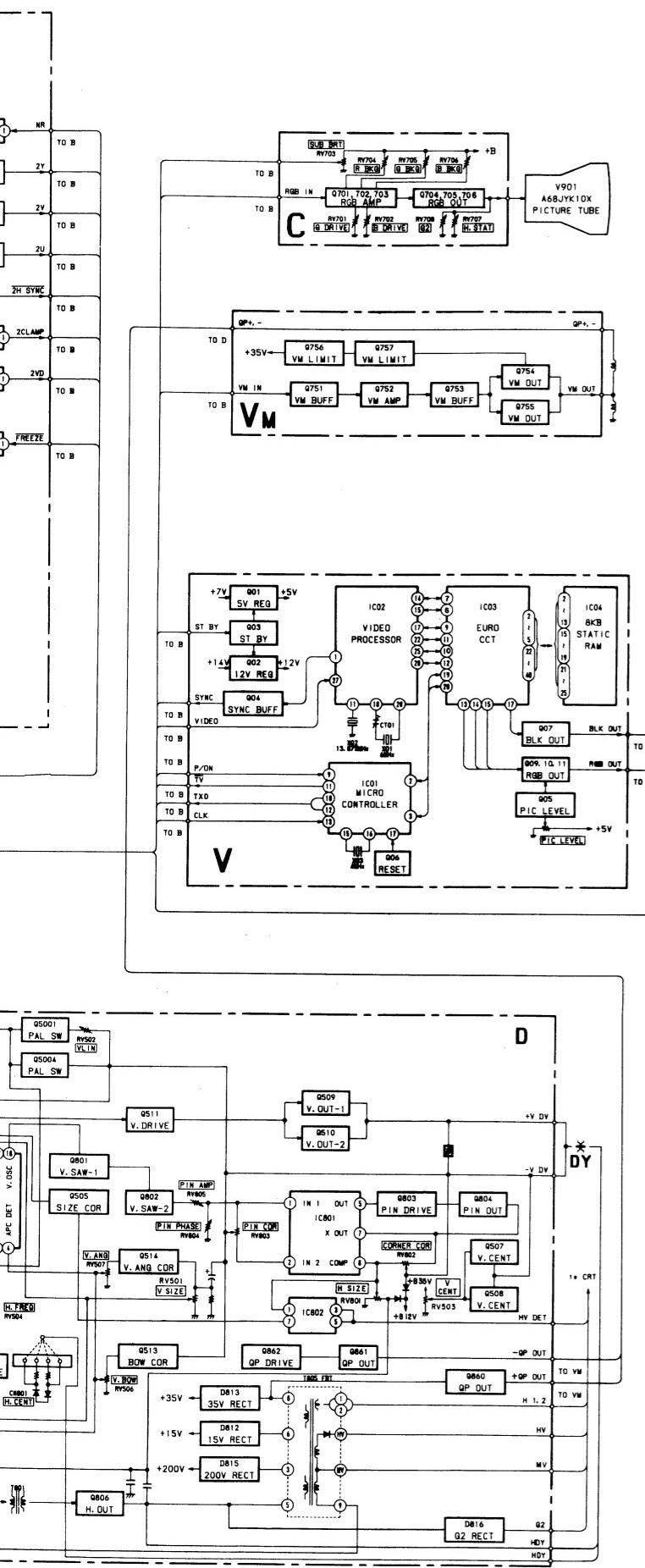


**SECTION 5
DIAGRAMS**

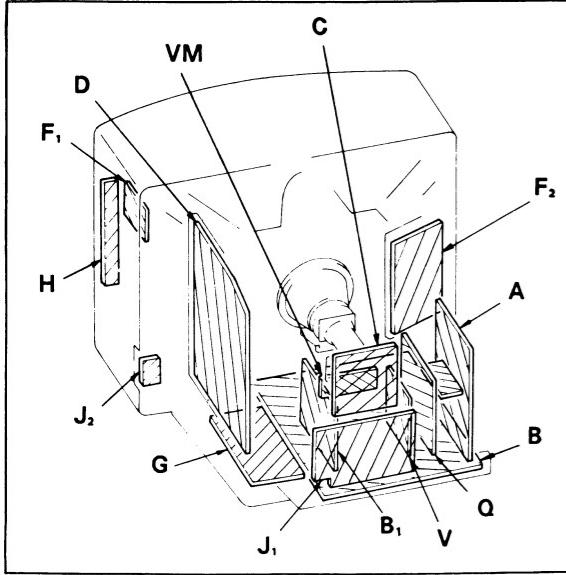
5-1. BLOCK DIAGRAM







5-2. CIRCUIT BOARDS LOCATION



Note :
 ● All capacitors are in μF unless otherwise noted. pF : μpF
 50WV or less are not indicated except for electrolytics.

● Indication of resistance, which does not have one for rating electrical power is, as follows.
 Pitch : 5mm
 Rating electrical power : 1/4W

● All resistors are in ohms.

● : nonflammable resistor.

● : fusible resistor.

● : internal component.

● : panel designation.

● All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

● All voltages are in V.

● Readings are taken with a $10\text{M}\Omega$ digital multimeter.

● Readings are taken with a color-bar signal input.
 no mark : PAL
 < > : SECAM
 () : NTSC 3.58MHz
 [] : NTSC 4.43MHz

● : adjustment for repair.

● Voltage variations may be noted due to normal production tolerances.

● : B+line

● : B-line

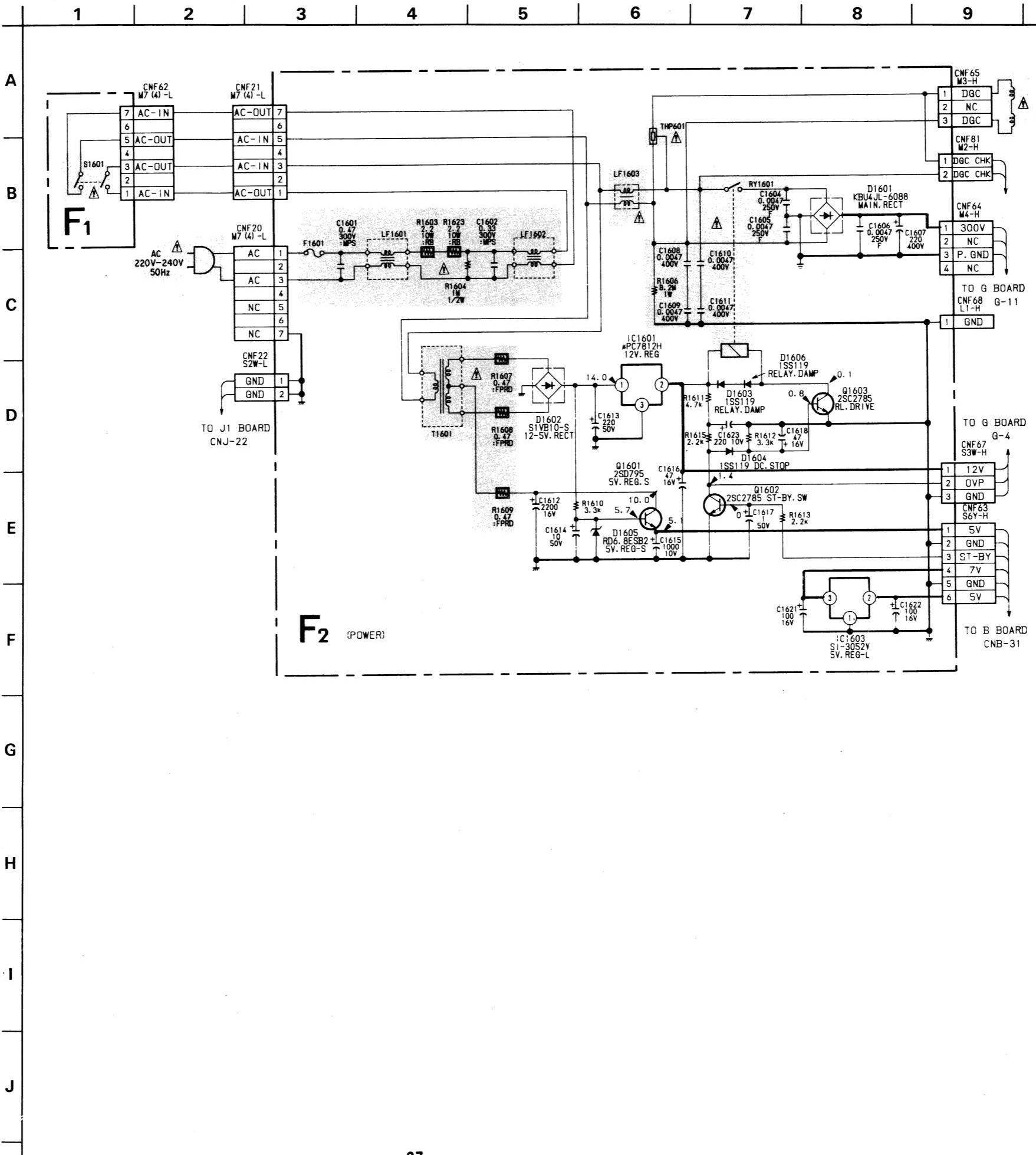
● : signal path.

Reference information

RESISTOR	: RN METAL FILM
	: RC SOLID
	: FPRD NONFLAMMABLE CARBON
	: FUSE NONFLAMMABLE FUSIBLE
	: RS NONFLAMMABLE WIREWOUND
	: RB NONFLAMMABLE CEMENT
COIL	: LF-8L MICRO INDUCTOR
CAPACITOR	: TA TANTALUM
	: PS STYROL
	: PP POLYPROPYLENE
	: PT MYLAR
	: MPS METALIZED POLYESTER
	: MPP METALIZED POLYPROPYLENE
	: ABL BIPOLEAR
	: ALT HIGH TEMPERATURE
	: ALR HIGH RIPPLE

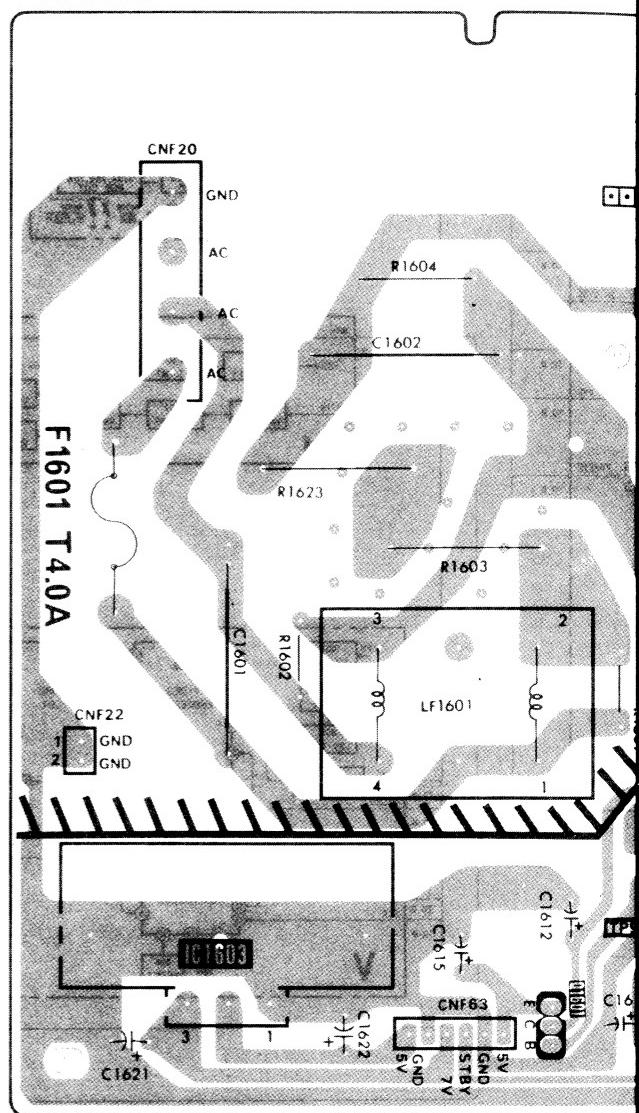
Note: The components identified by shading and mark are critical for safety. Replace only with part number specified.

5-3. SCHEMATIC DIAGRAM (1)

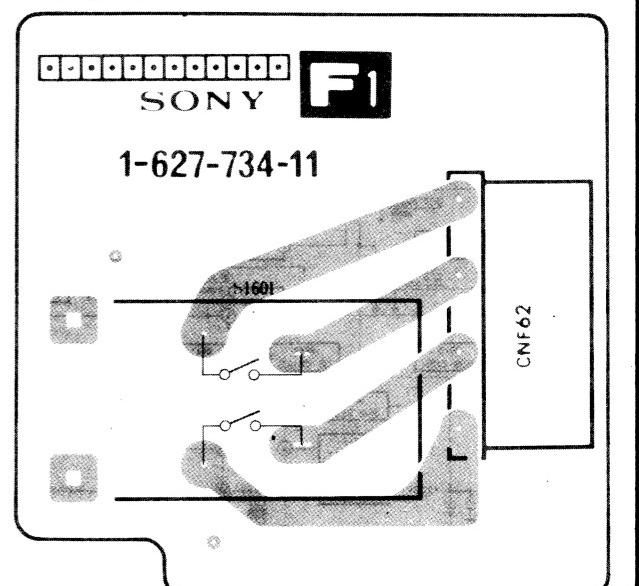


5-4. PRINTED WIRING BOARDS (1)

-F2 board-



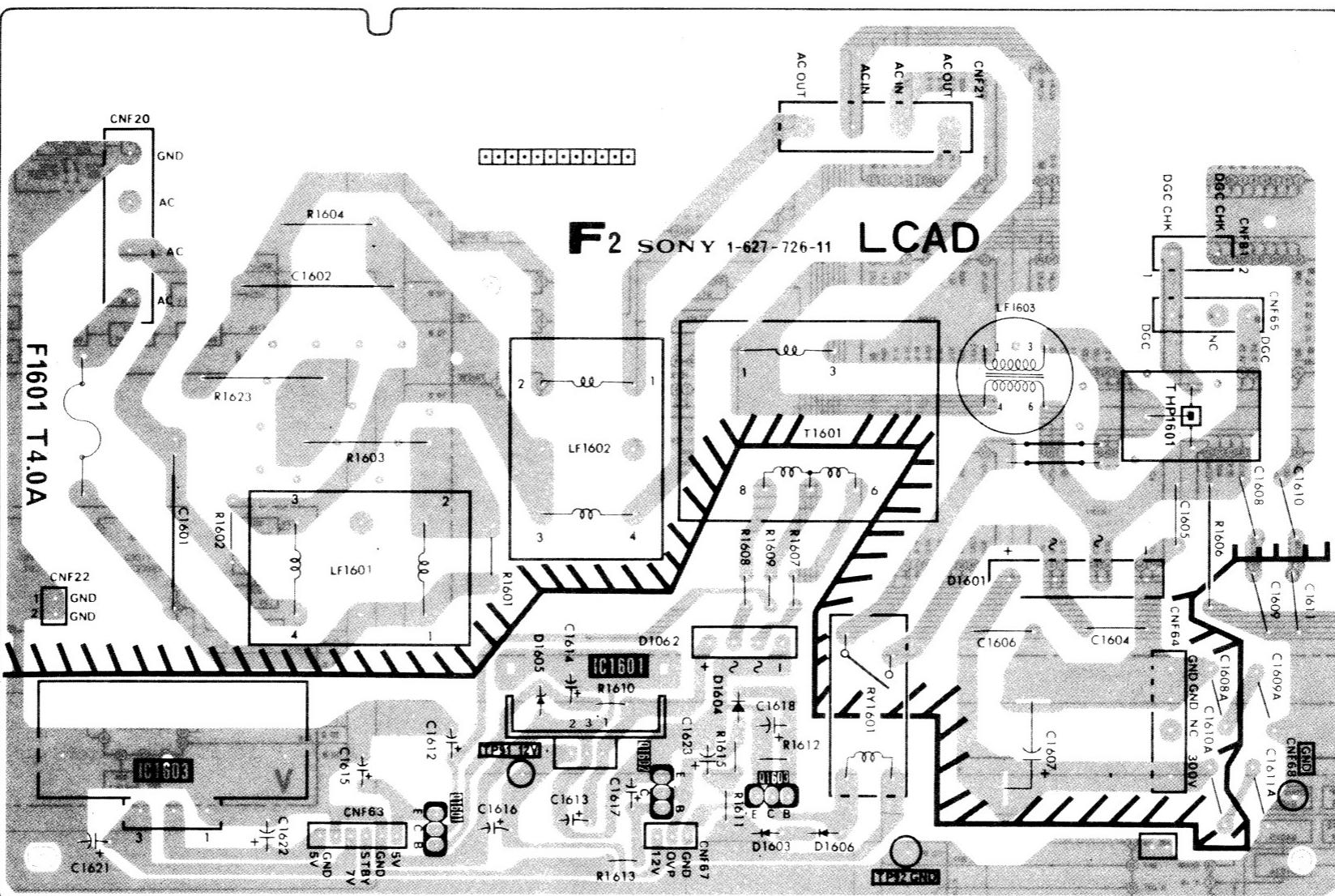
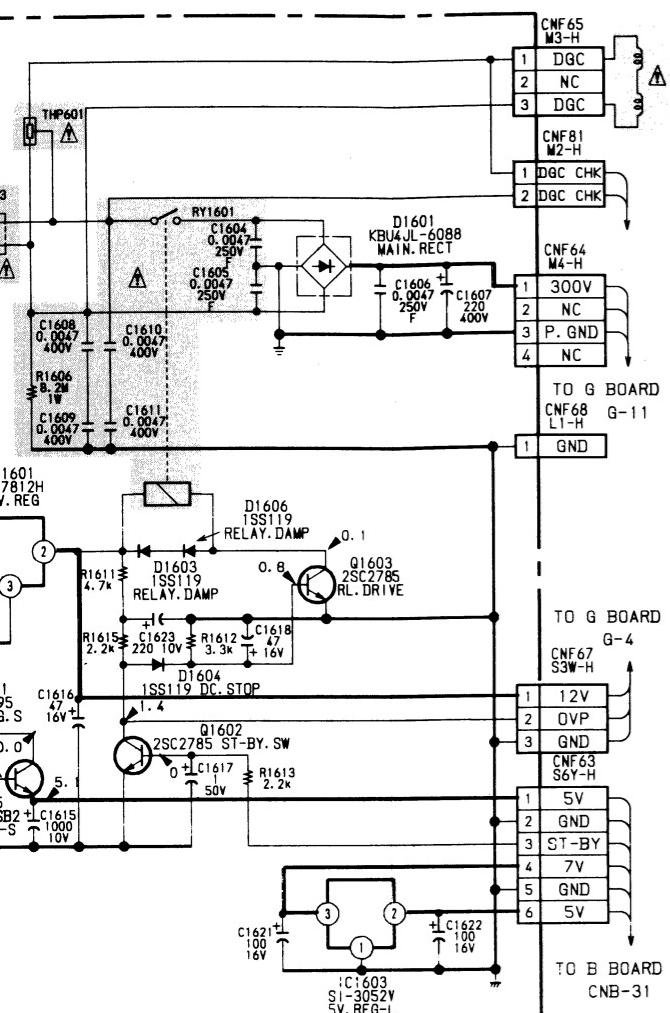
-F1 board-

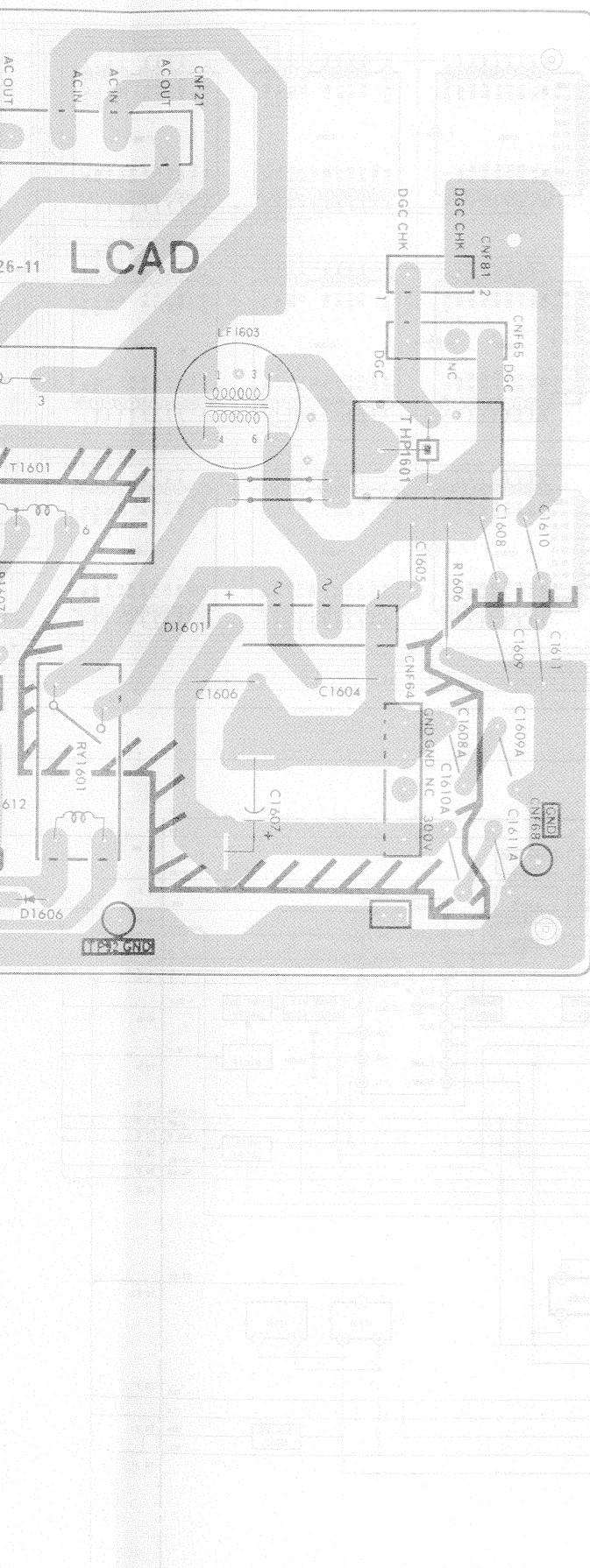
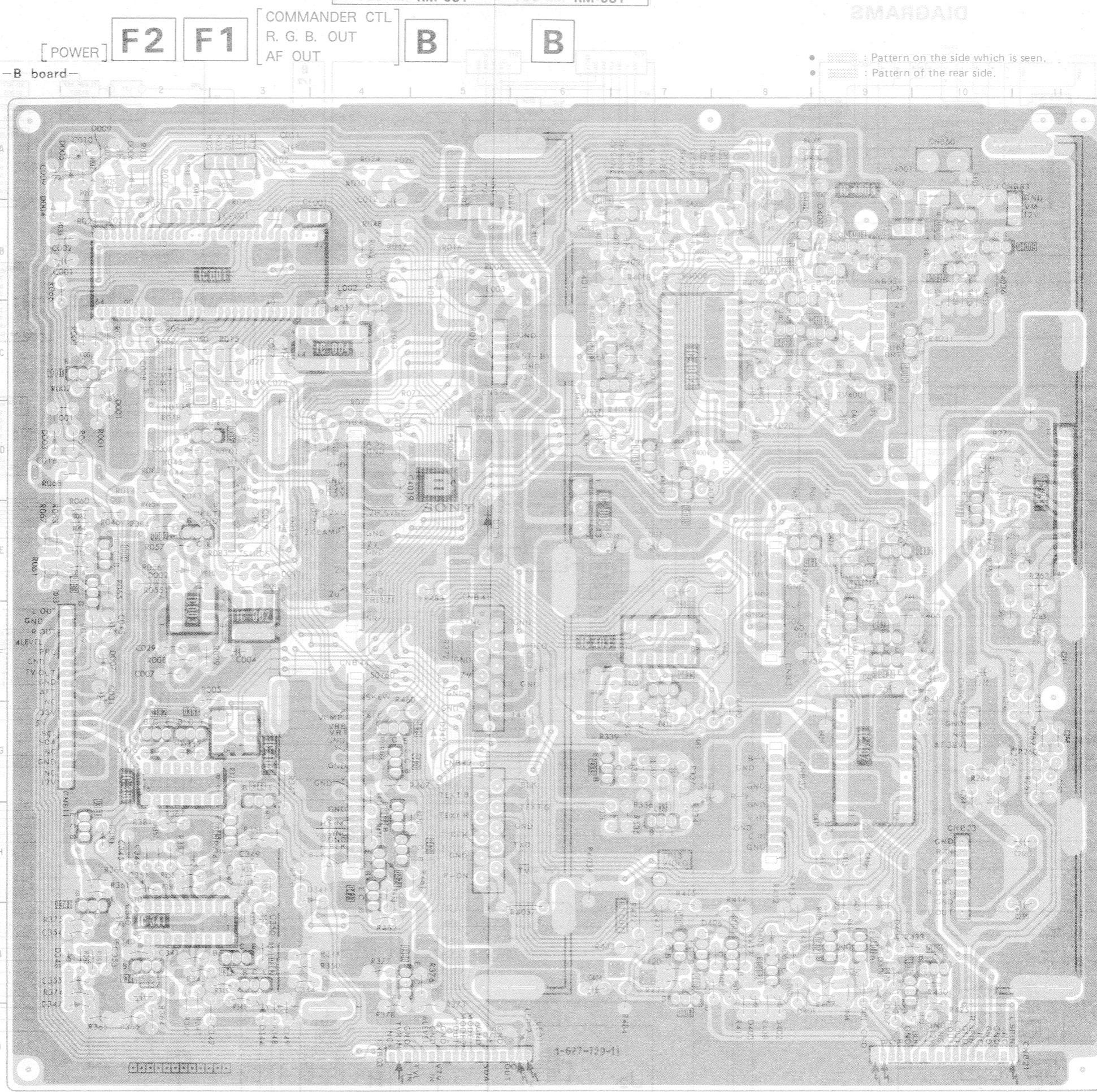


6 | 7 | 8 | 9 |

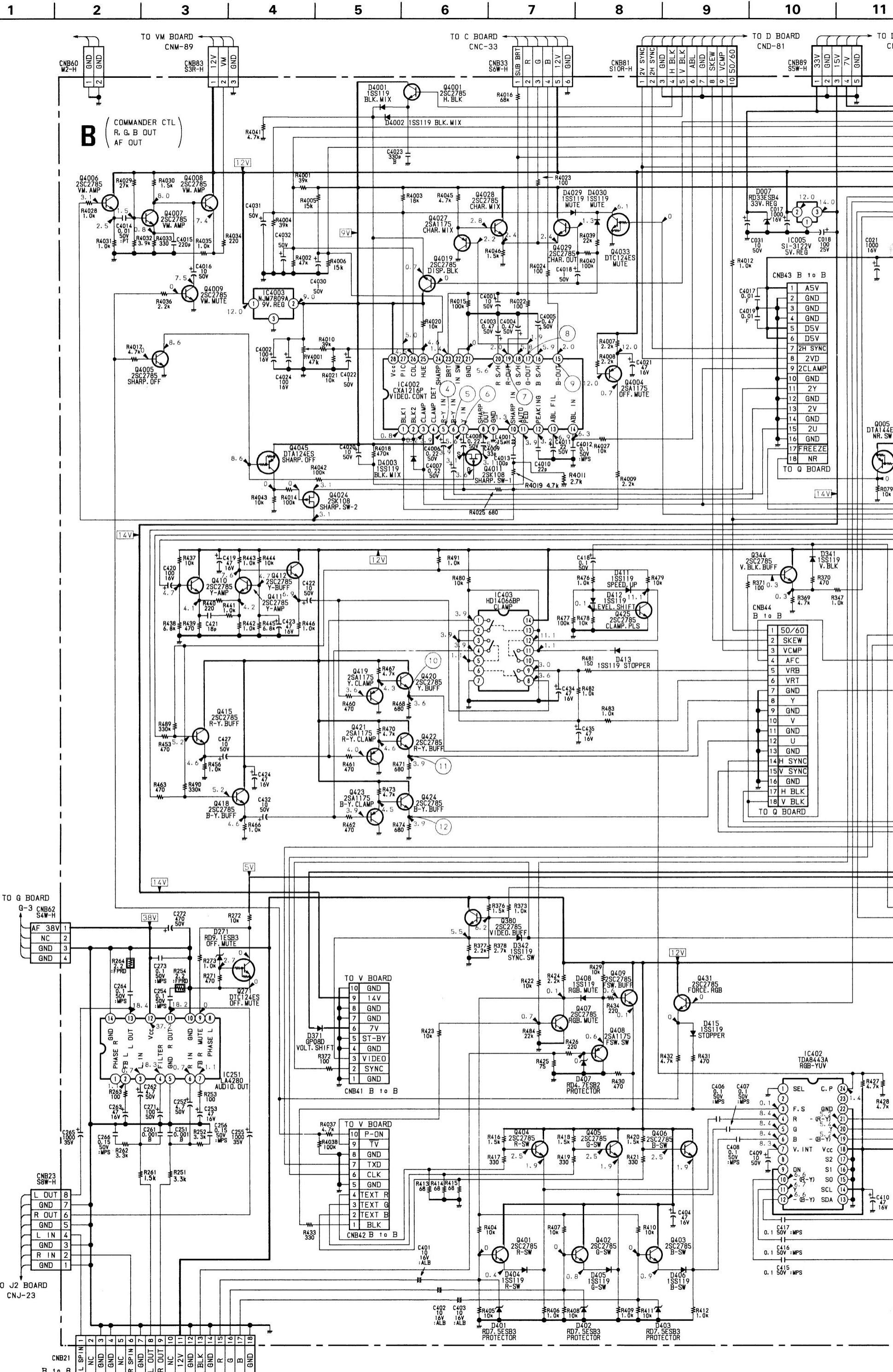
5-4. PRINTED WIRING BOARDS (1)

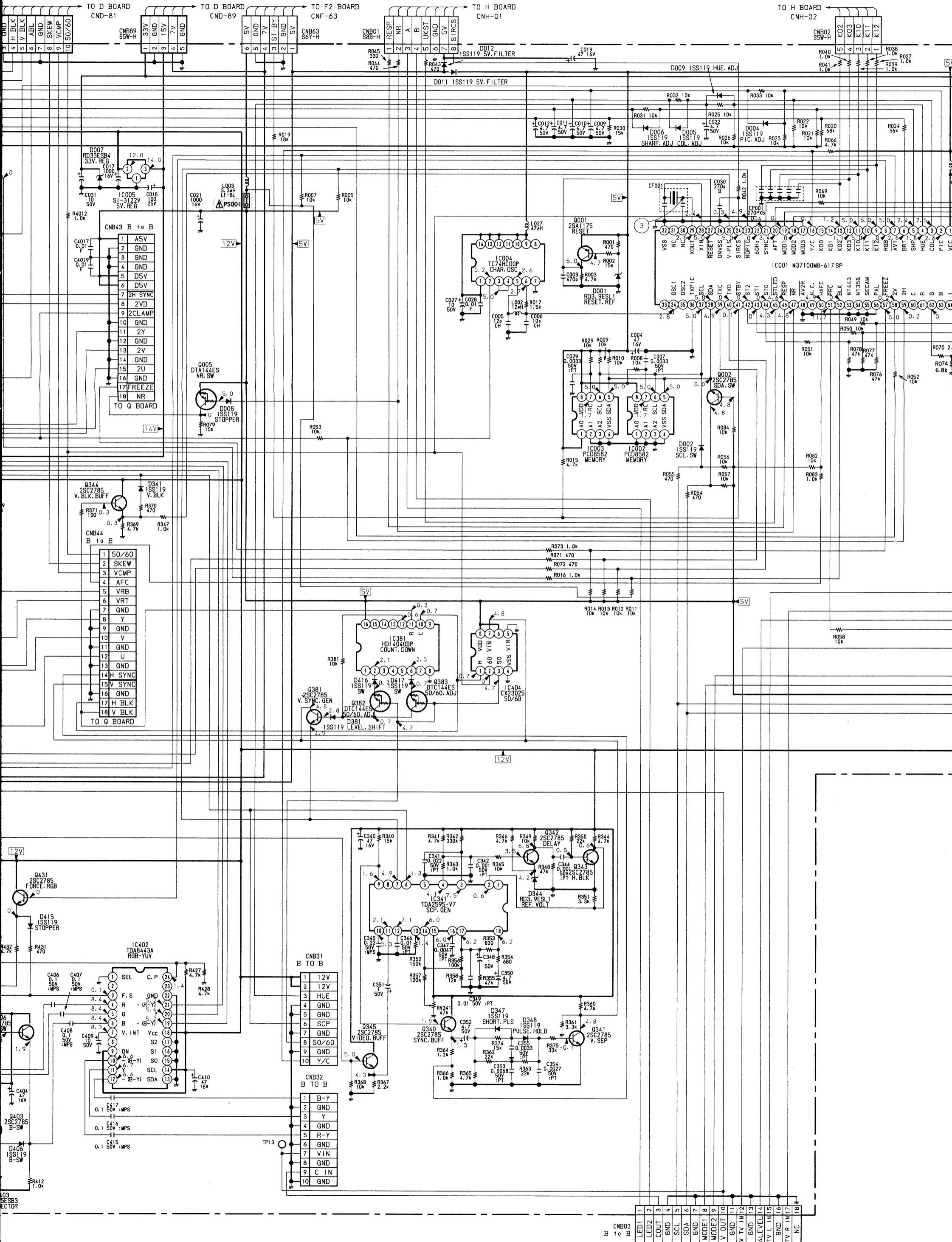
-F2 board-

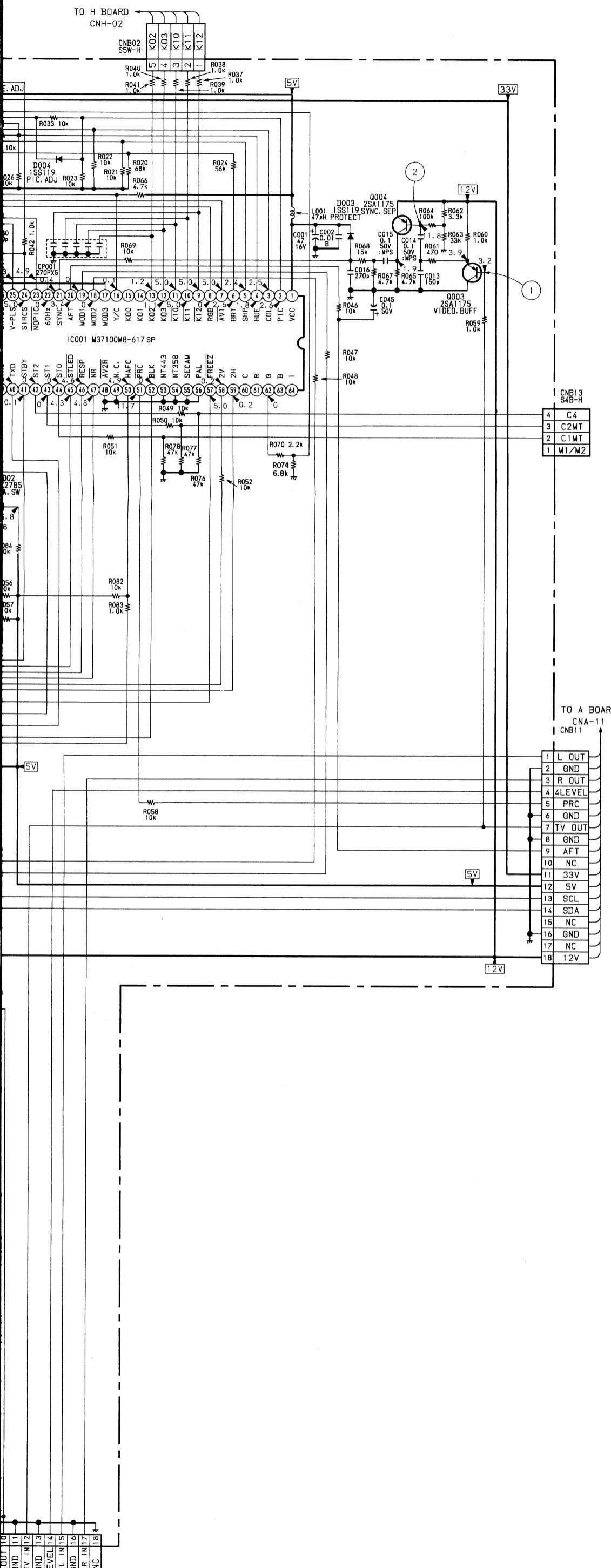


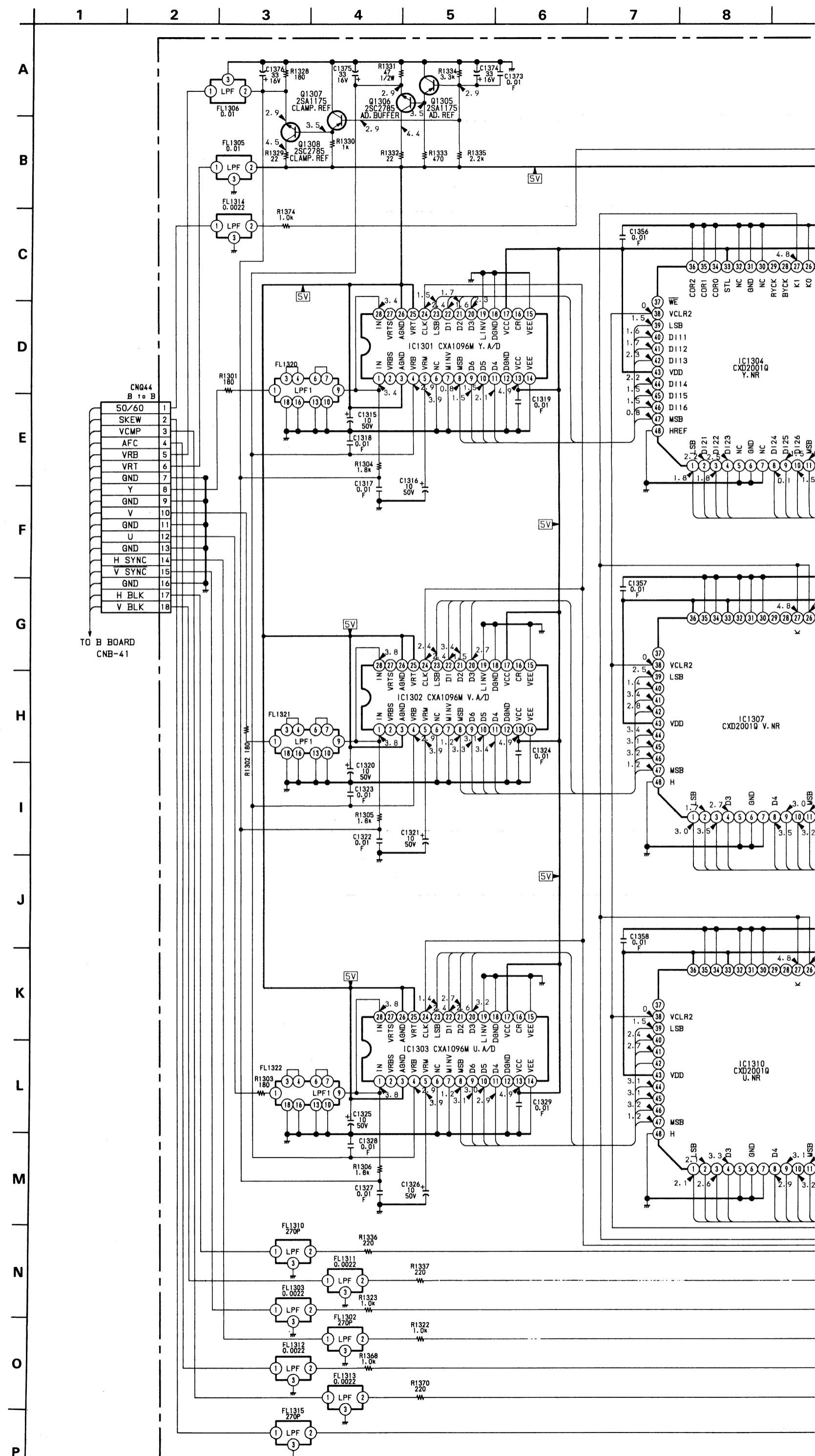


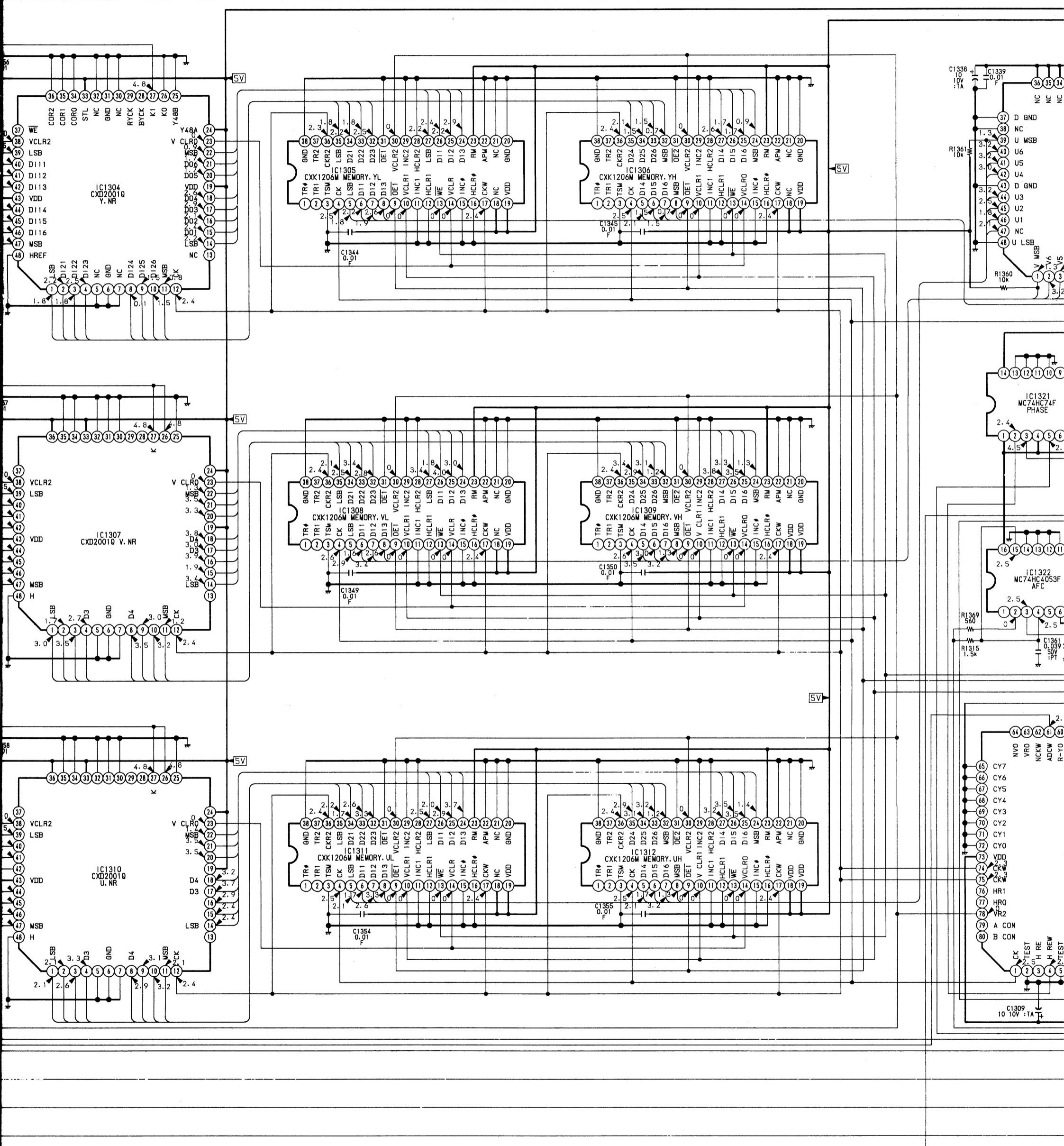
SCHEMATIC DIAGRAM (2)

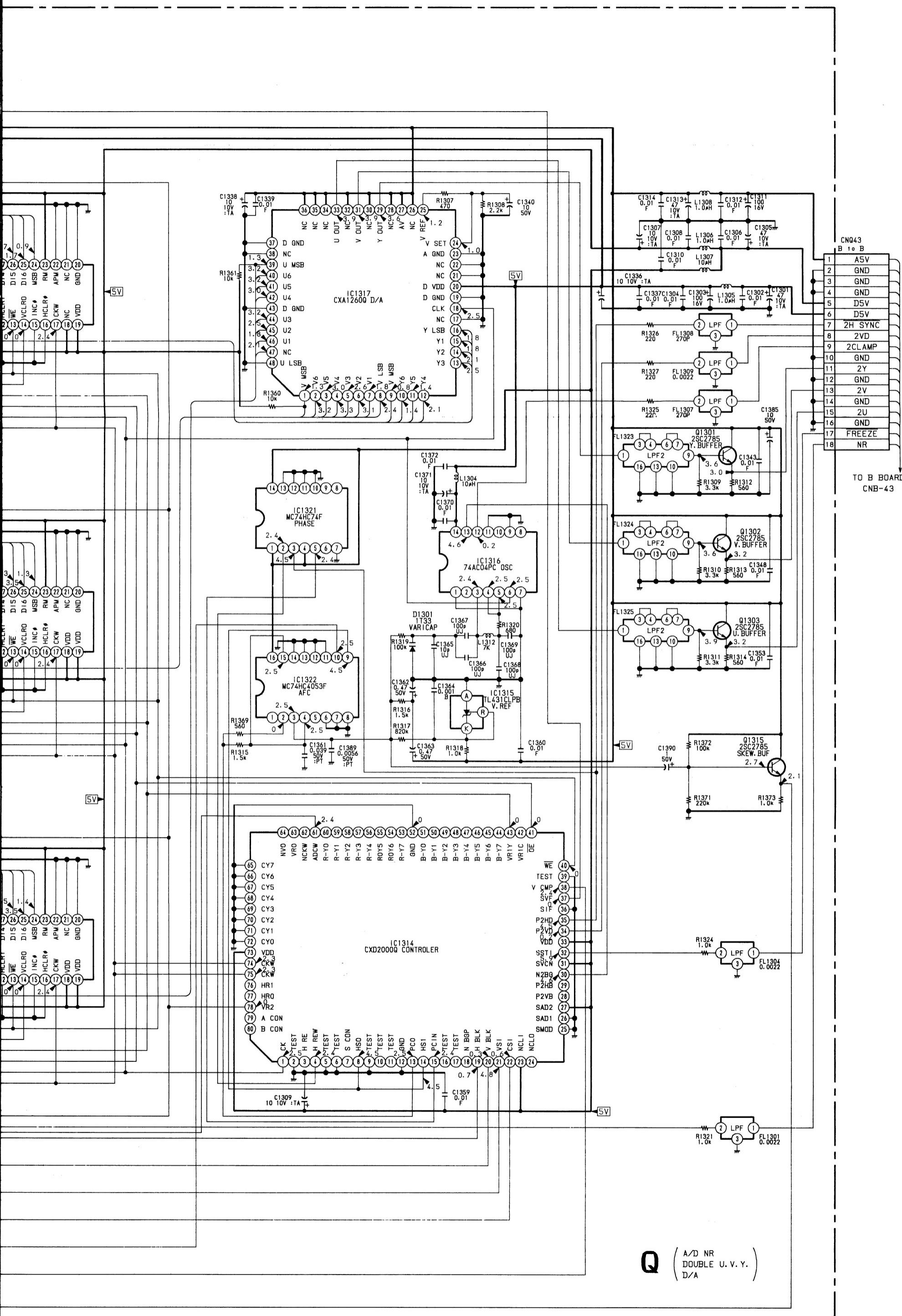












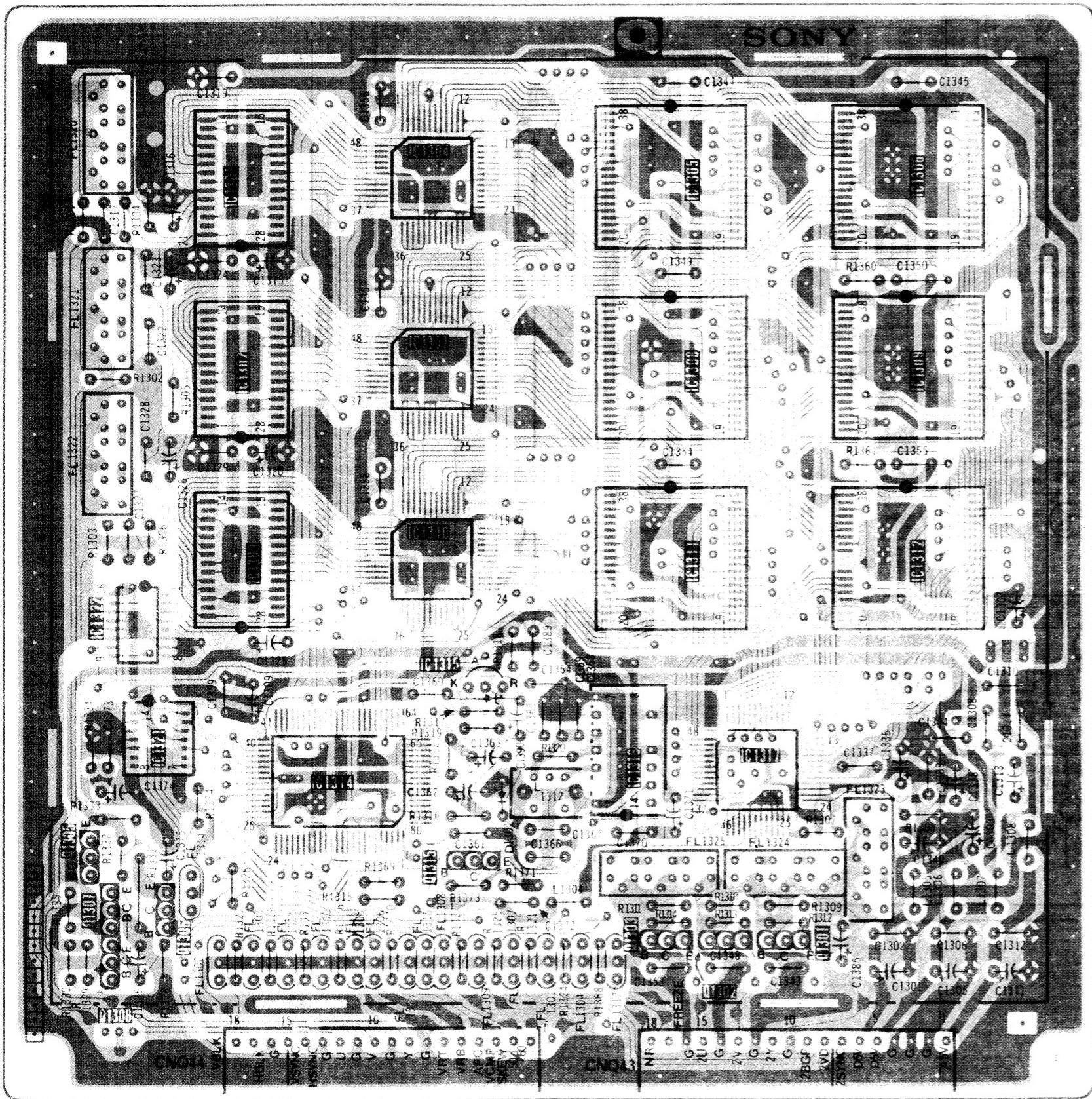
PRINTED WIRING BOARD (2)

—Q board—

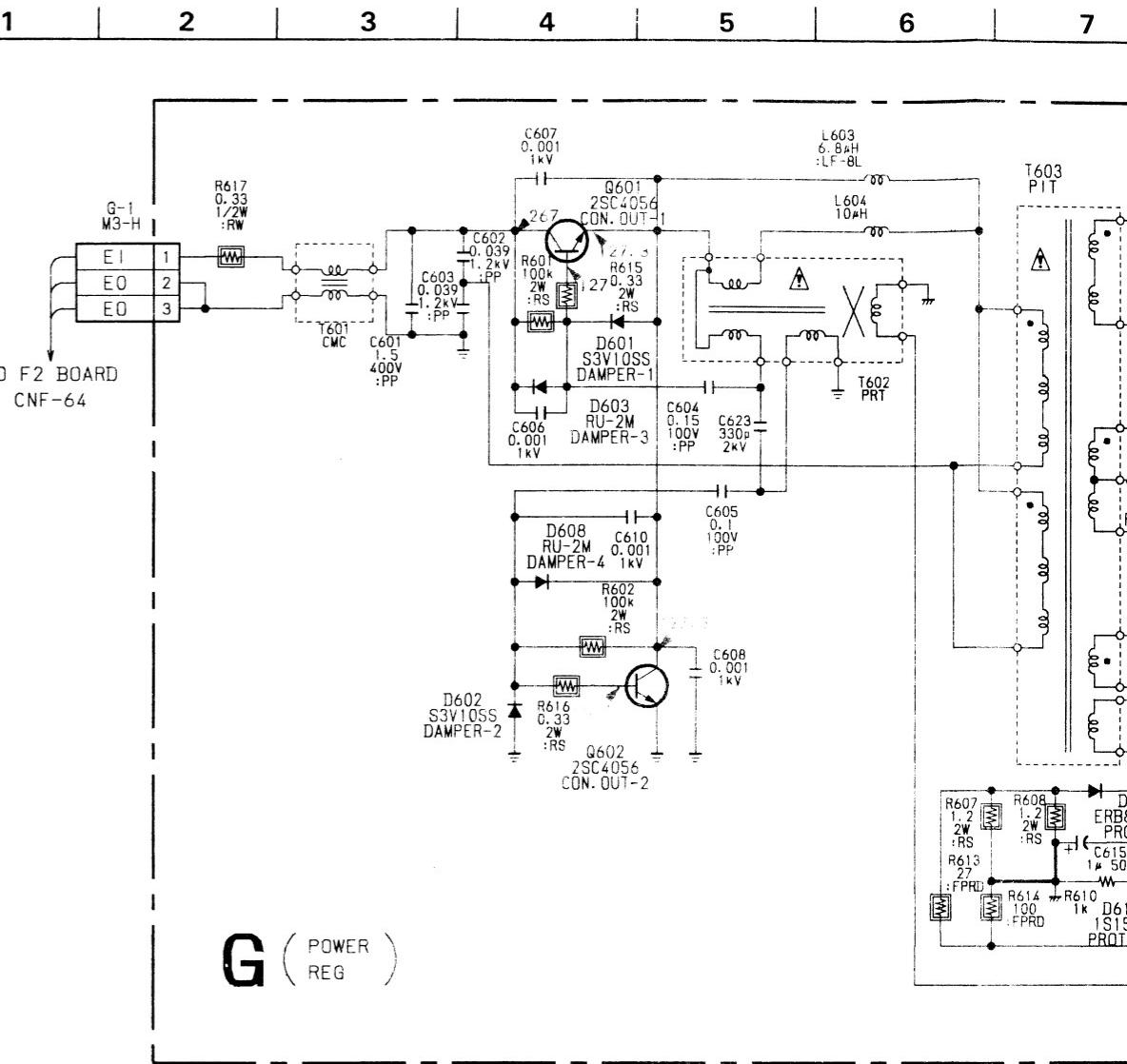
- : Pattern on the side which is seen.
- : Pattern of the rear side.

A/D NR
DOUBLE U. V. Y.
D/A

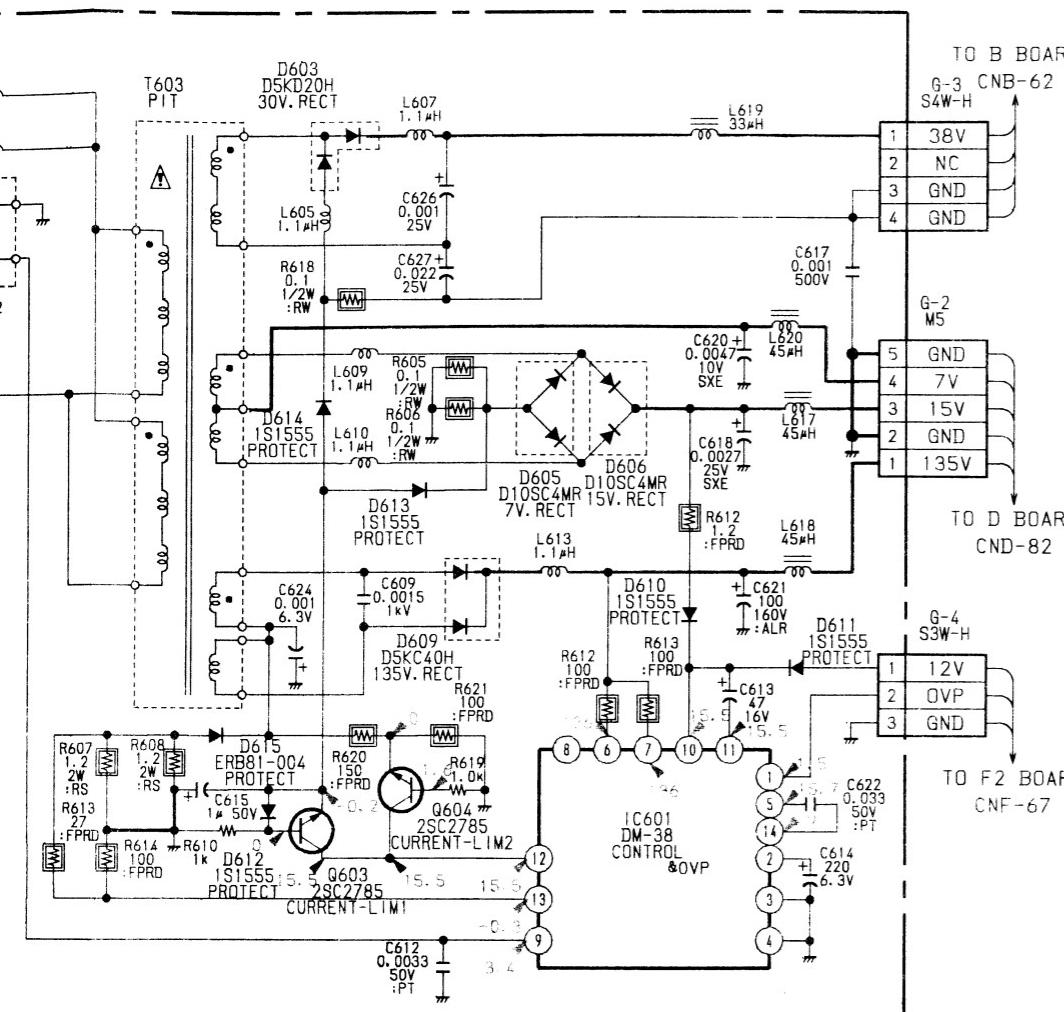
Q



SCHEMATIC DIAGRAM (3)



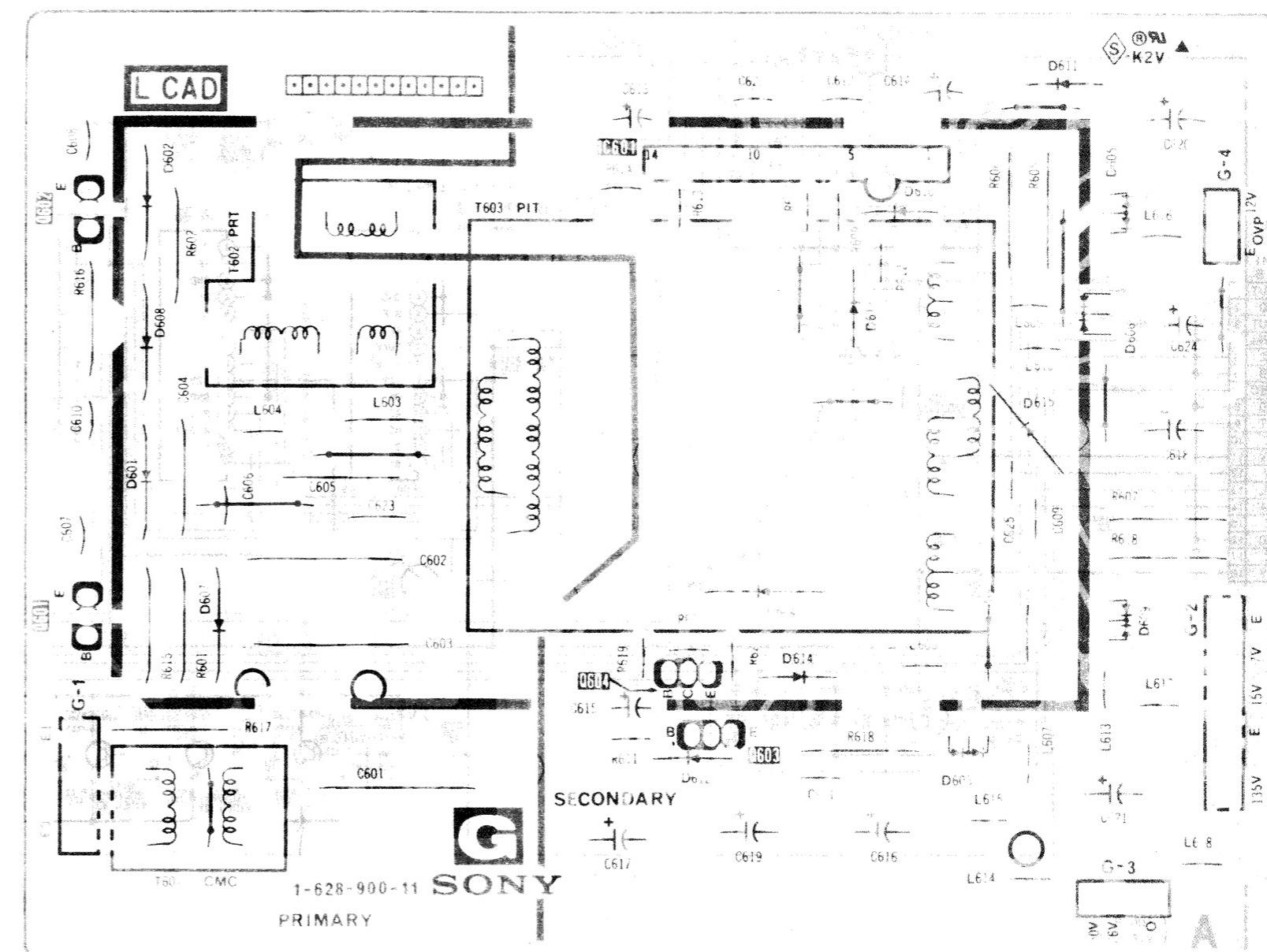
6 | 7 | 8 | 9 | 10 | 11 |



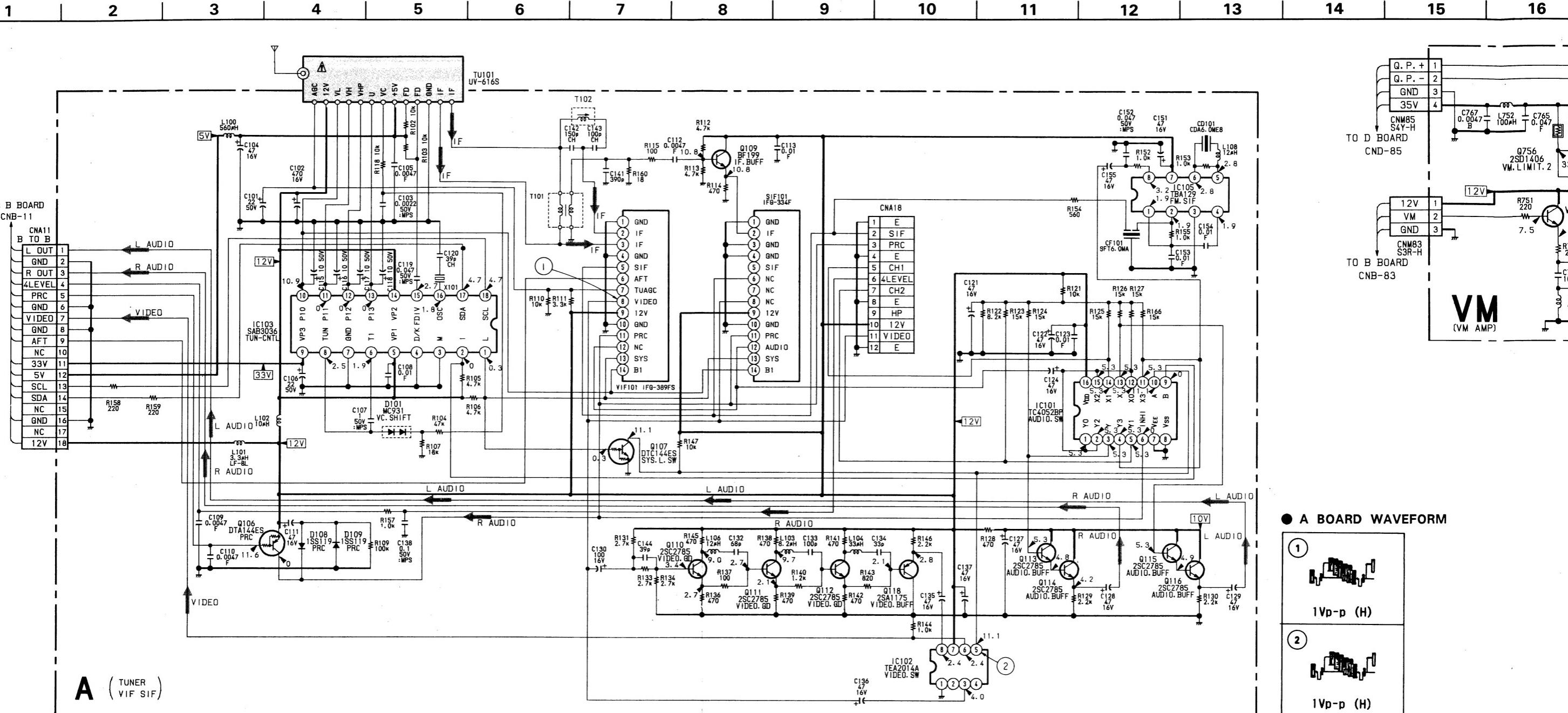
PRINTED WIRING BOARD (3)

G [POWER REG]

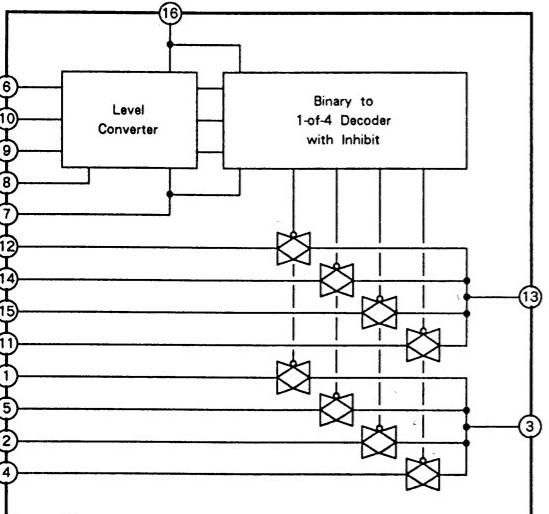
— G board —



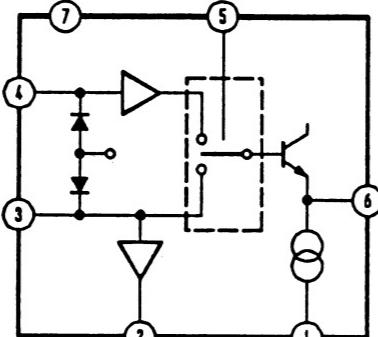
SCHEMATIC DIAGRAM (4)



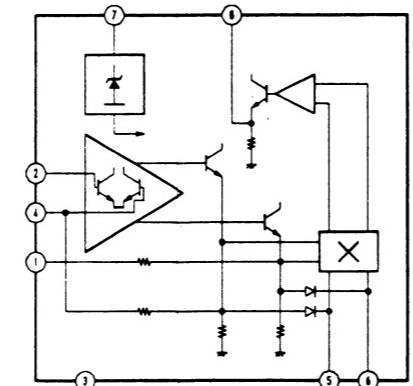
A BOARD IC101 TC4052BP



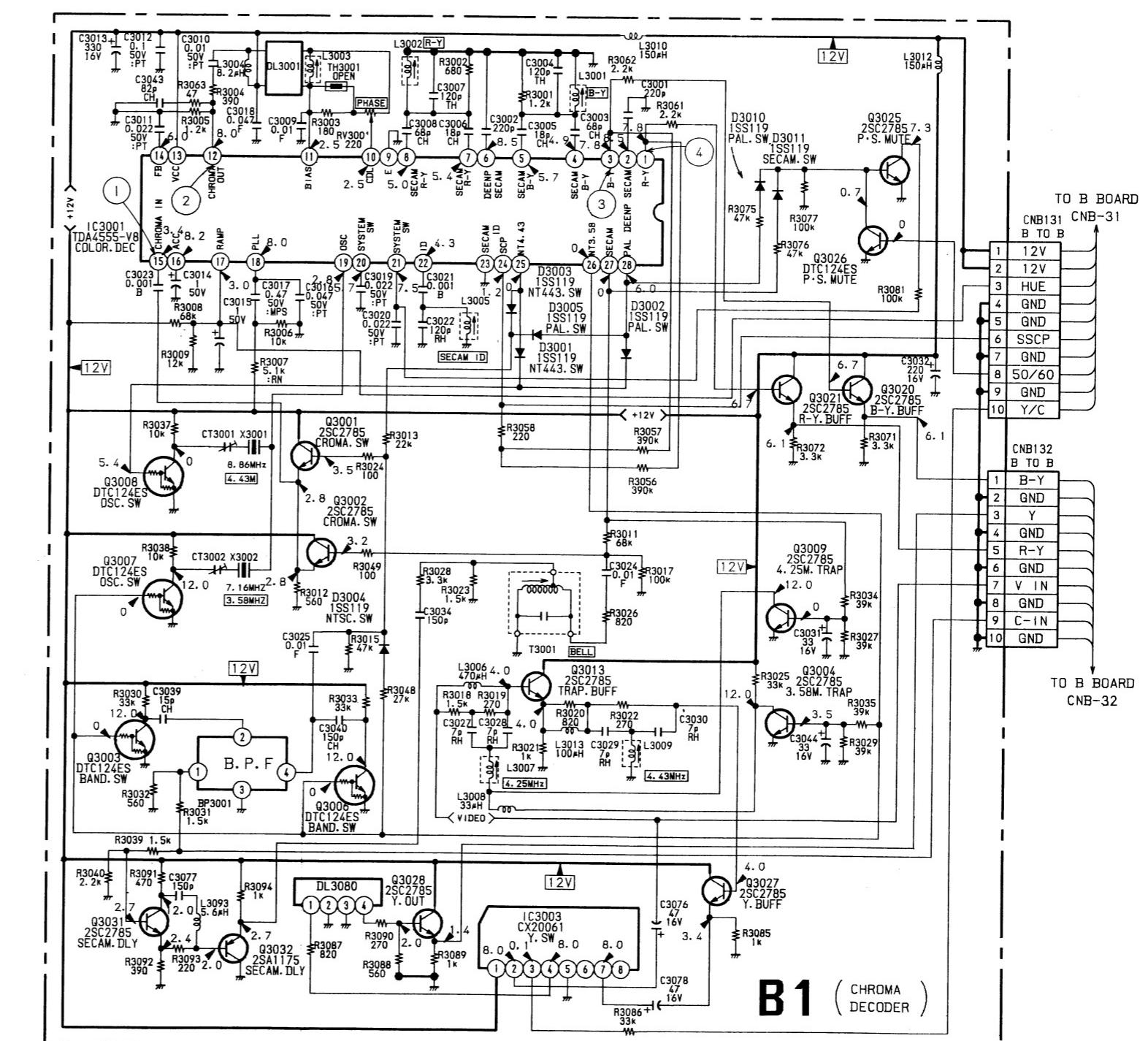
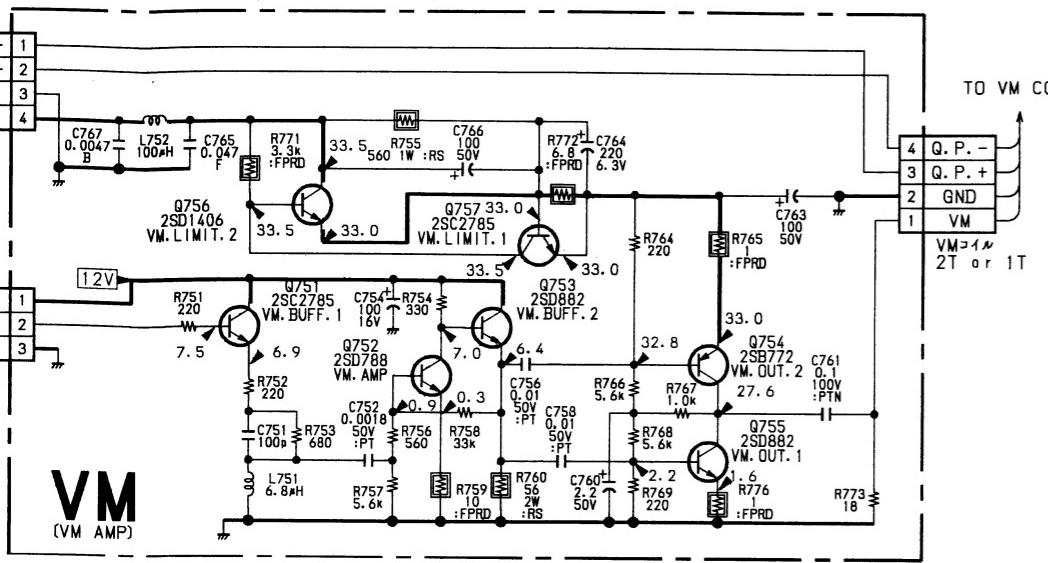
A BOARD IC102 TEA2014A



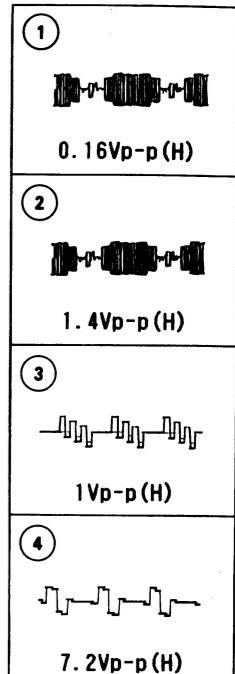
A BOARD IC105 TBA129



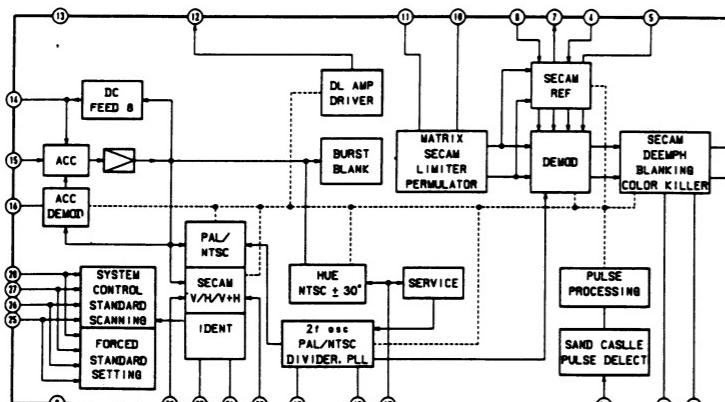
15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31



● B1 BOARD WAVEFORM



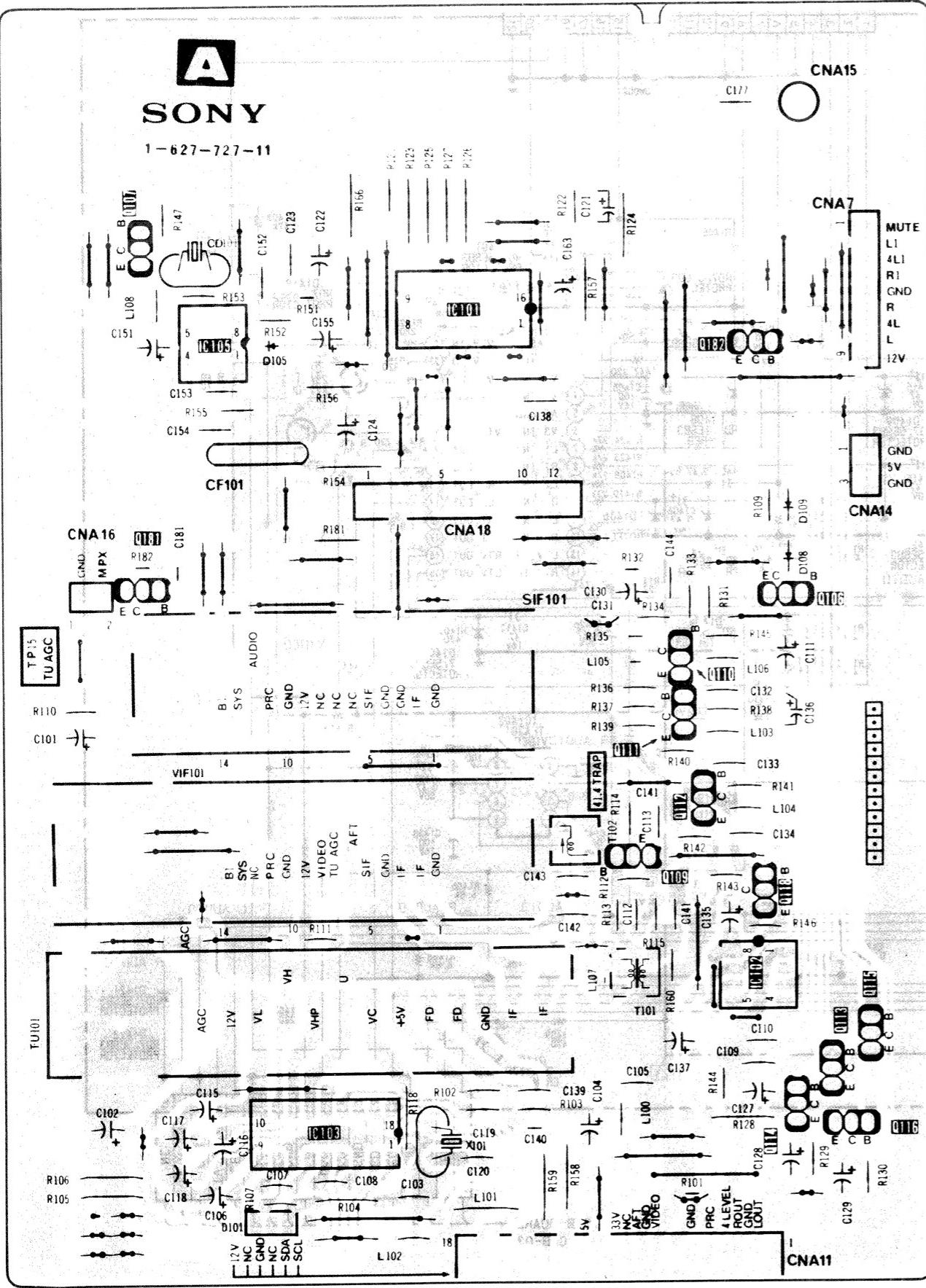
B1 BOARD IC3001 TDA4555



B1 (CHROMA DECODER)

PRINTED WIRING BOARDS (4)

-A board-



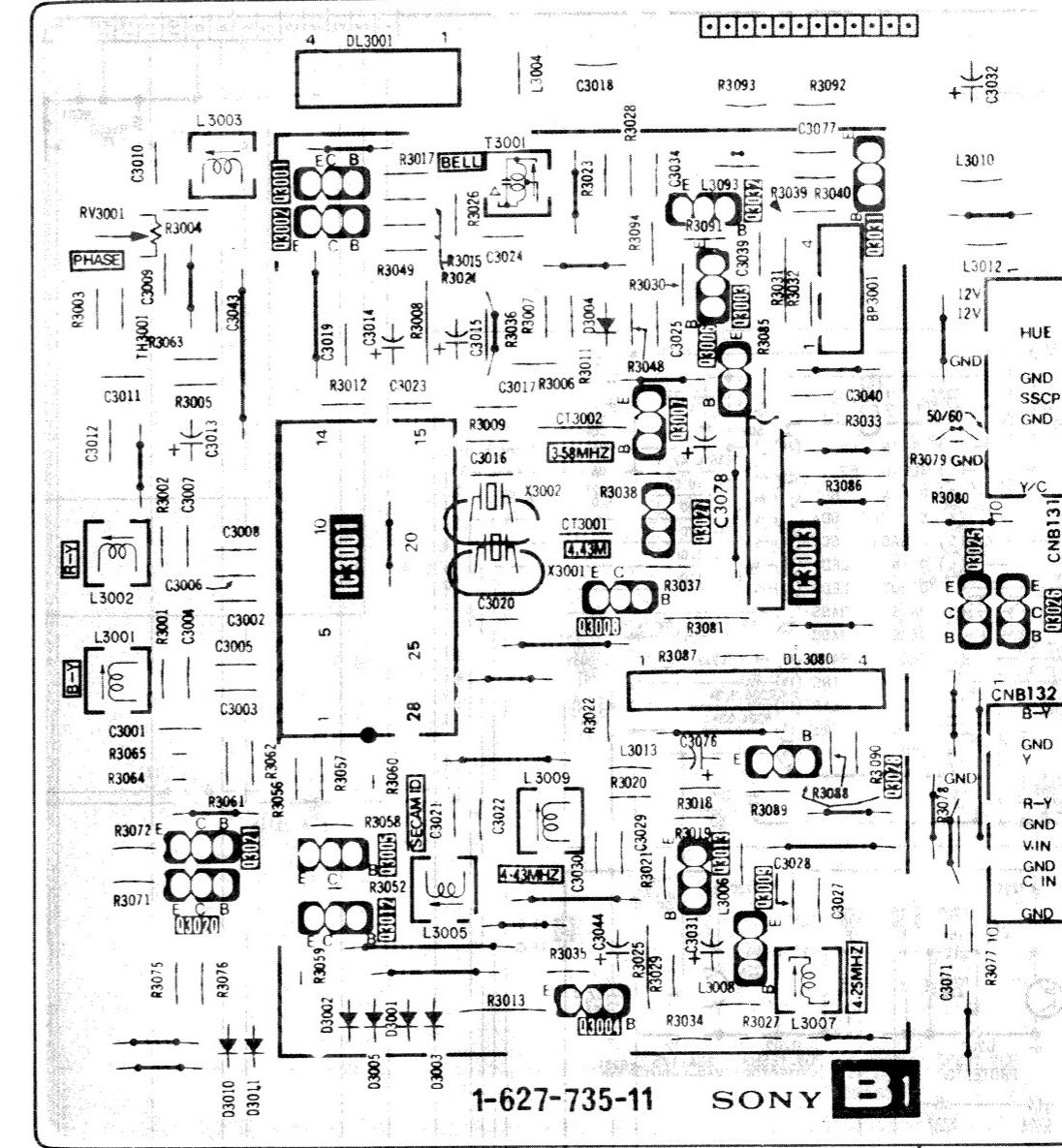
TUNER
VIF SIF

A

CHROMA DECODE

VM [VM AMI]

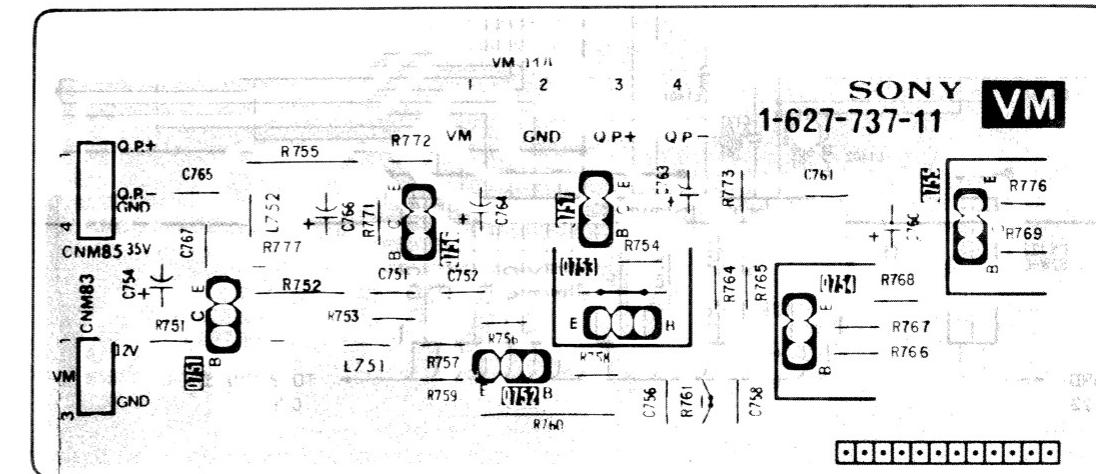
-B1 board-

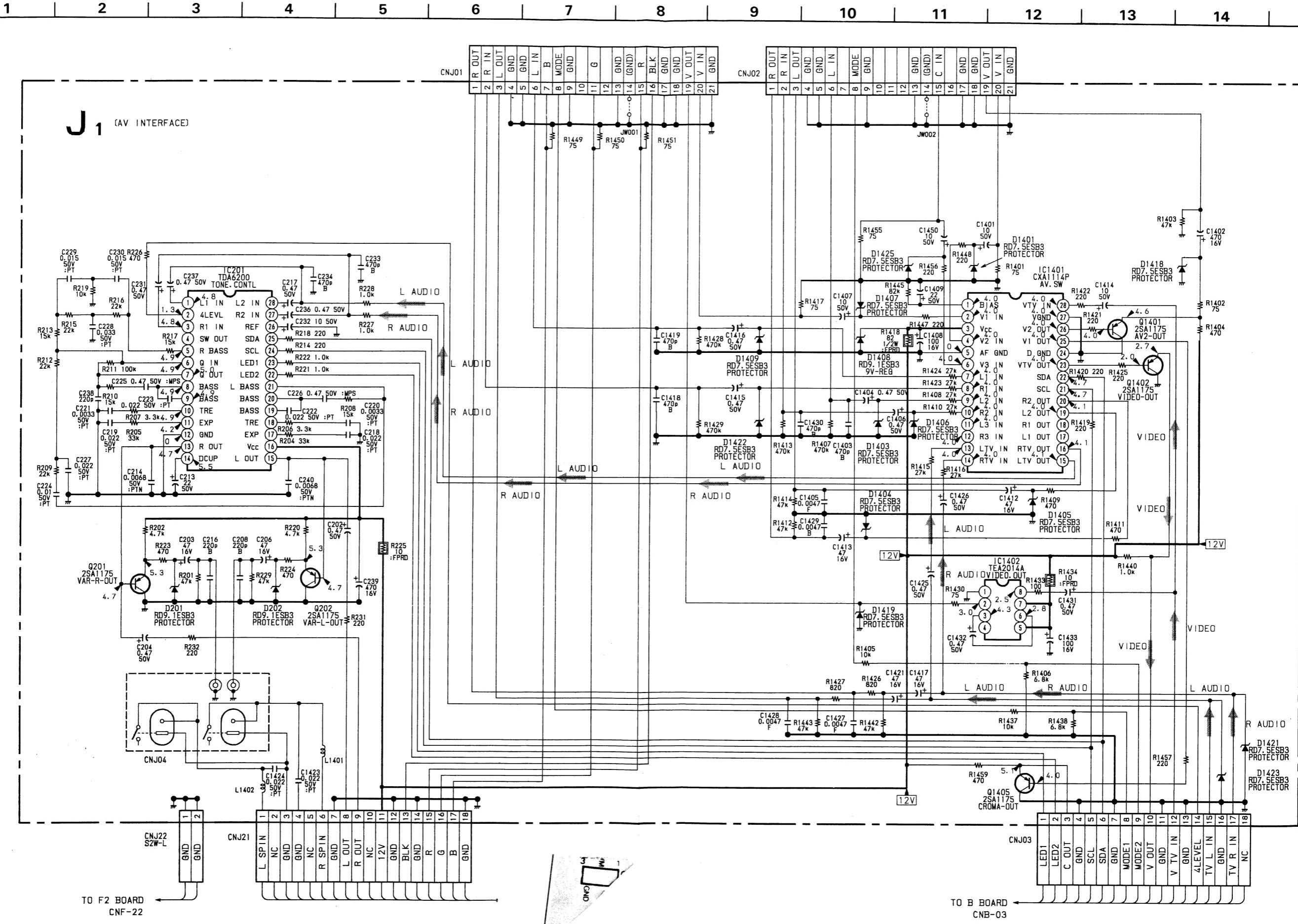


1-627-735-1

SONY

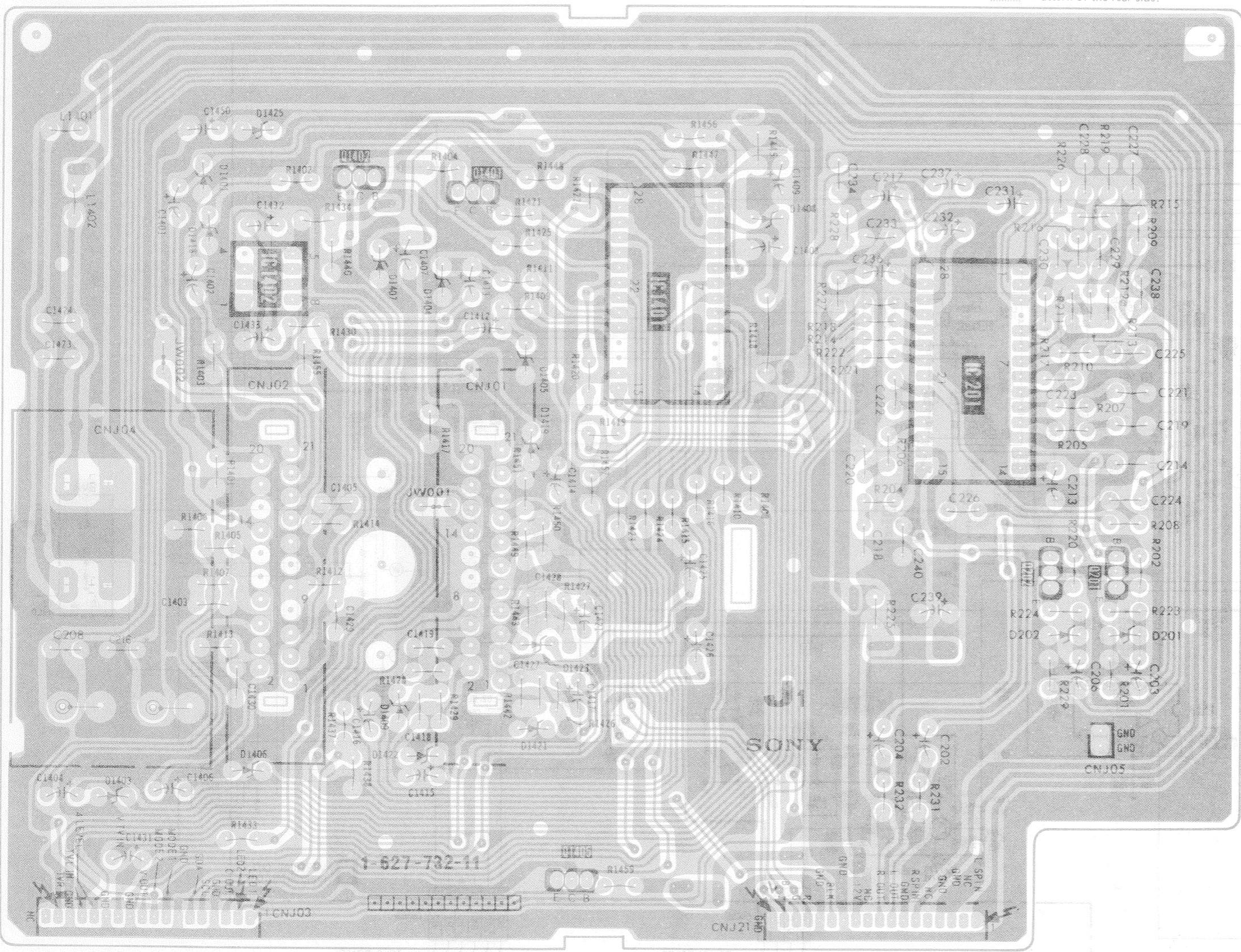
- VM board -



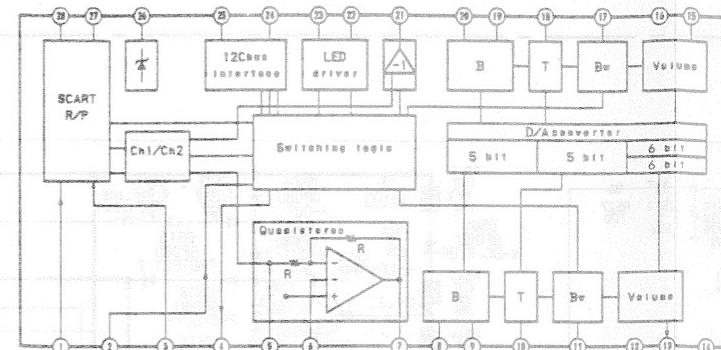


PRINTED WIRING BOARD (5)

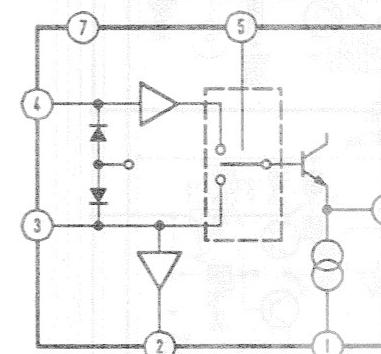
—J1 board—



J1 BOARD IC201 TDA6200

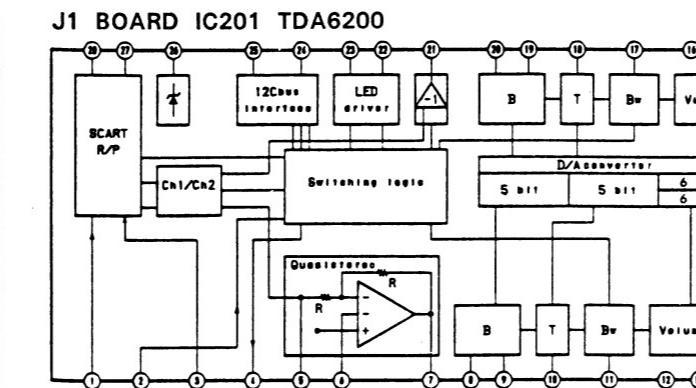
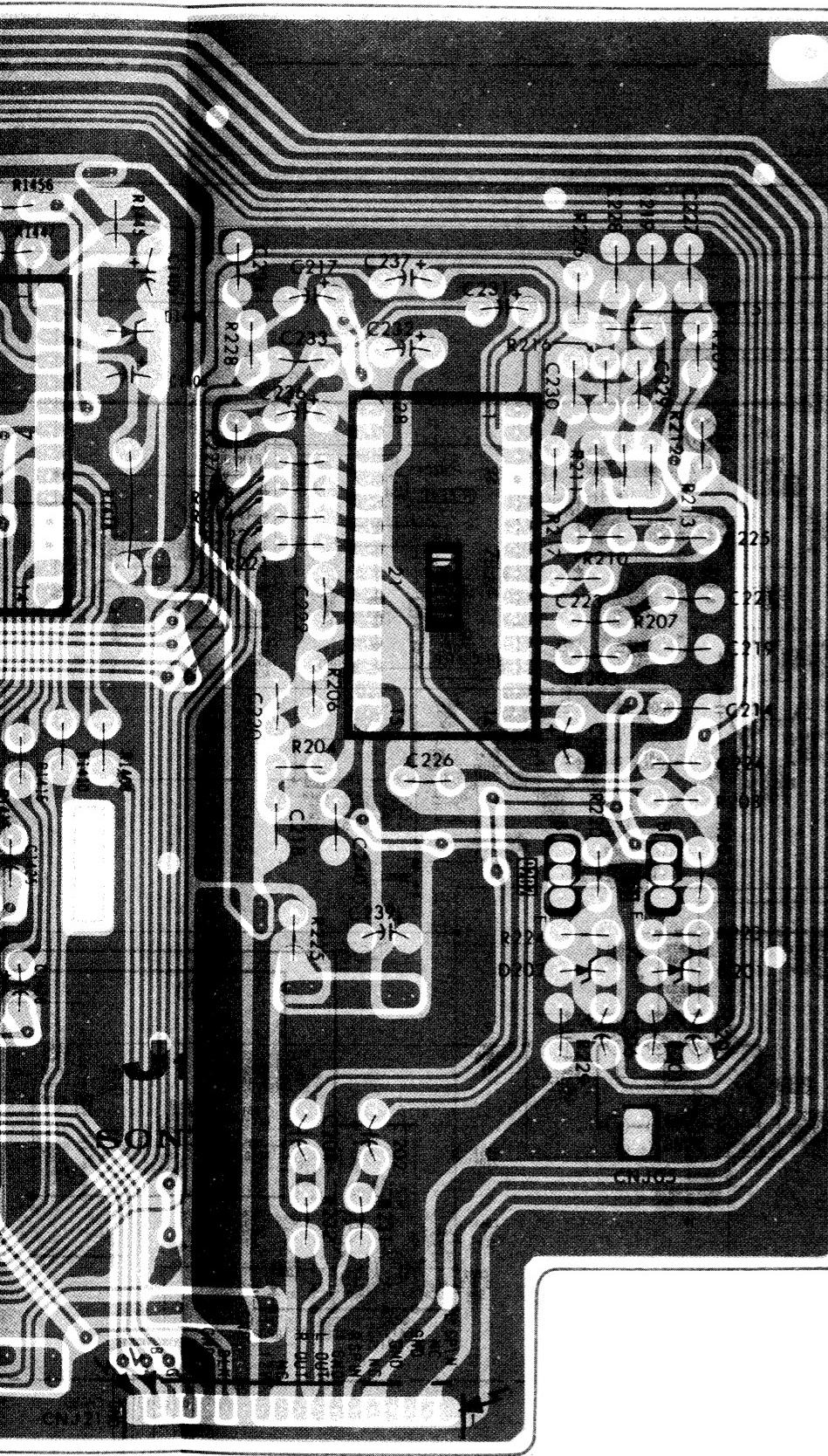
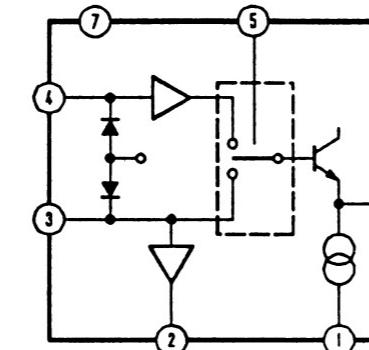


J1 BOARD IC1402 TEA2014A



J1**J1**

- : Pattern on the side which is seen.
- : Pattern of the rear side.

**J1 BOARD IC1402 TEA2014A**

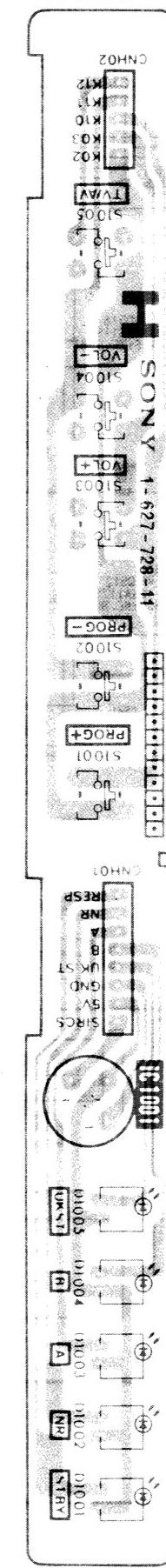
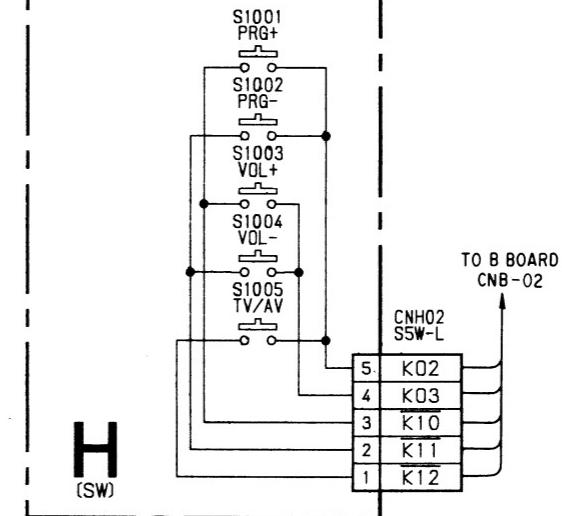
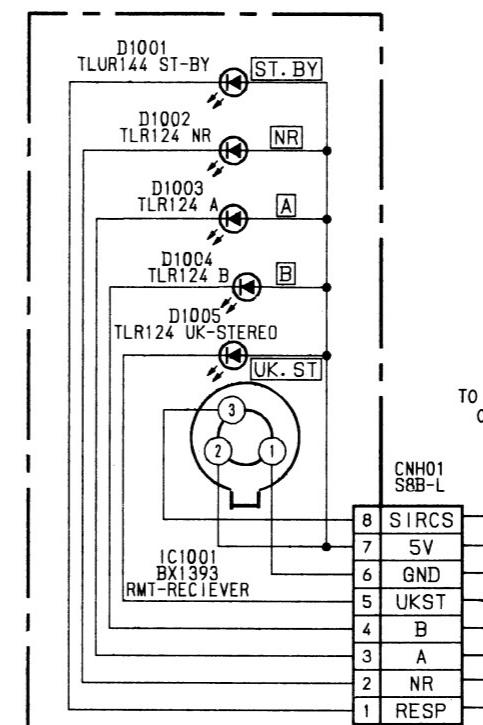
SCHEMATIC DIAGRAM (6)

1 2 3

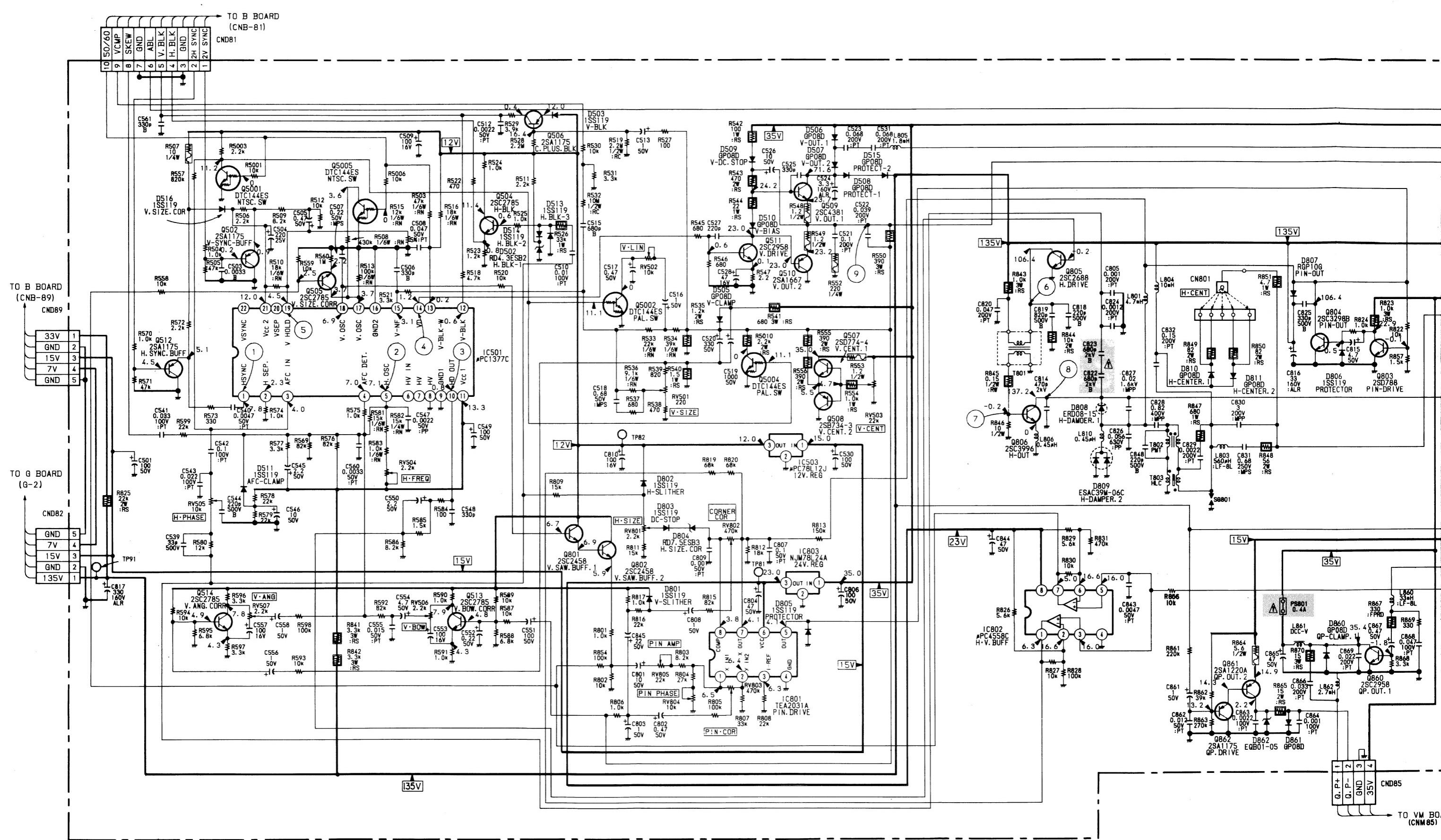
PRINTED WIRING BOARD (6)

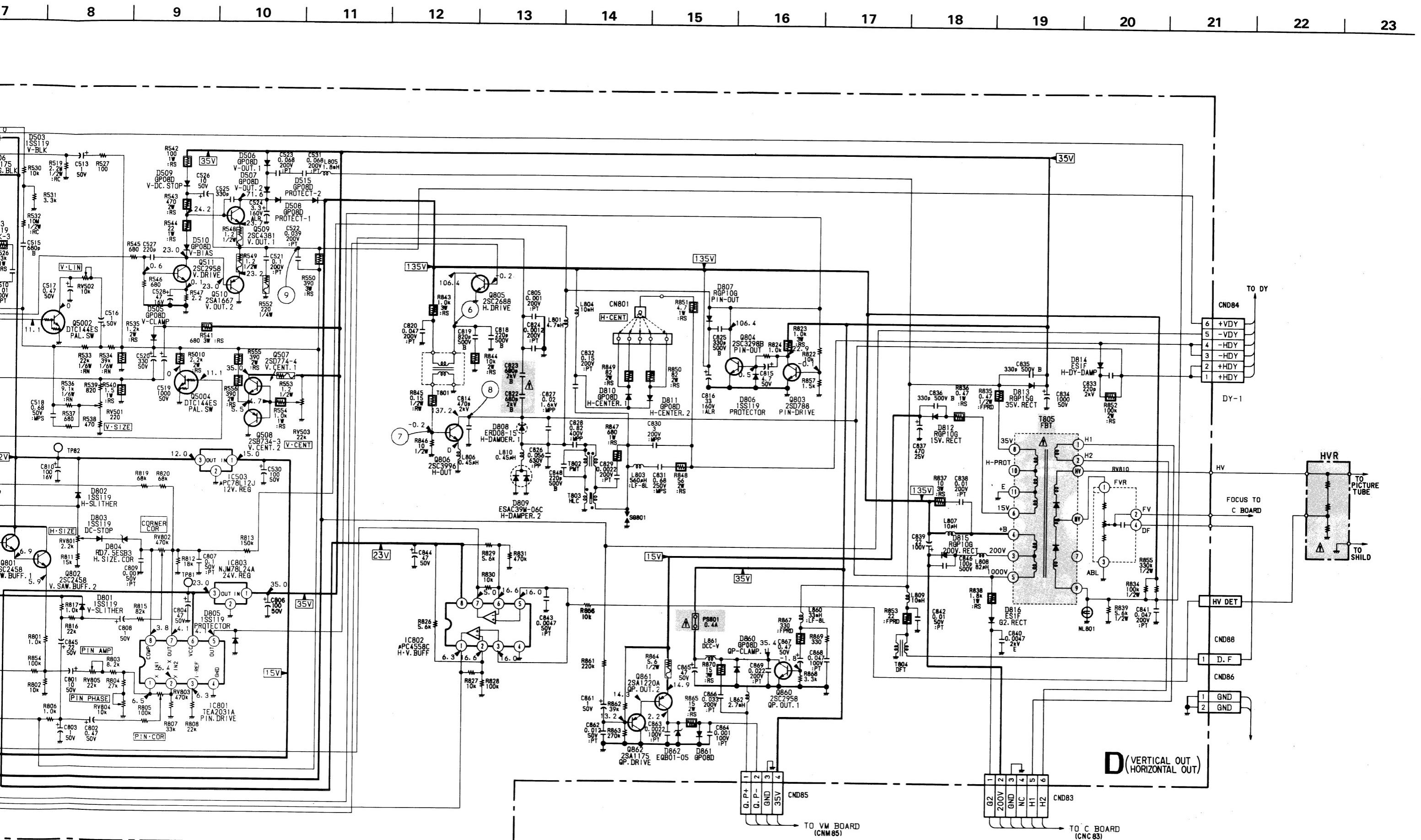
[SW] **H**

A B C D E F G H



SCHEMATIC DIAGRAM (7)



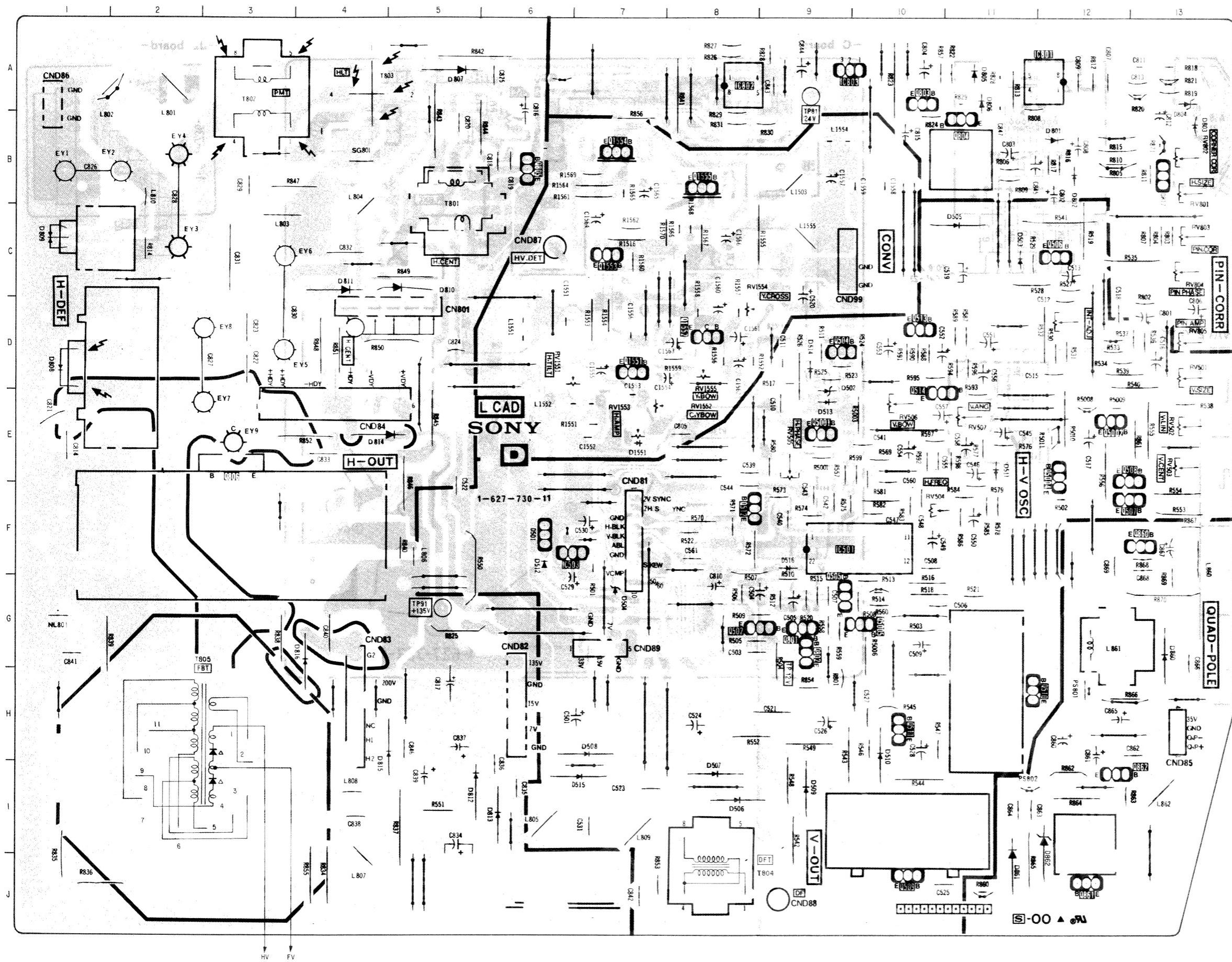


PRINTED WIRING BOARD (7)

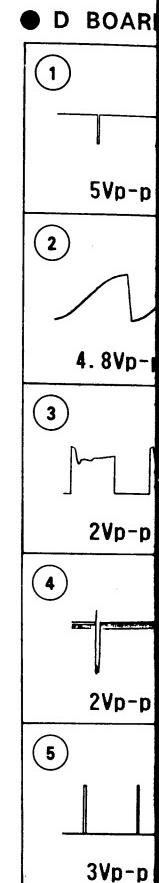
[H/V OUT] D

D

-D board-



IC	D511	E-11
IC501	F-9	
IC503	F-6	
D513	E-9	
D514	D-9	
IC801	A-12	
D515	I-7	
IC802	A-8	
D516	F-9	
IC803	A-9	
TRANSISTOR		
Q502	G-8	
Q504	D-9	
Q505	G-9	
Q506	C-12	
Q507	F-12	
Q508	E-12	
Q509	J-10	
Q510	H-11	
Q511	H-10	
Q512	F-8	
Q513	I-5	
Q514	I-6	
Q801	D-1	
Q802	C-1	
Q803	C-5	
Q804	C-4	
Q805	I-5	
Q806	I-6	
Q807	E-4	
Q808	H-5	
Q809	G-4	
Q810	G-13	
Q811	J-11	
Q812	I-12	
VARIABLE RESISTOR		
RV501	D-13	
RV502	E-13	
RV503	E-13	
RV504	F-10	
RV505	E-9	
RV506	E-10	
RV507	E-11	
RV801	B-13	
RV802	B-13	
RV803	C-13	
DIODE		
D502	D-9	
D503	C-11	
D505	C-11	
D506	I-8	
D507	I-8	
D508	H-7	
D509	I-9	
D510	H-10	

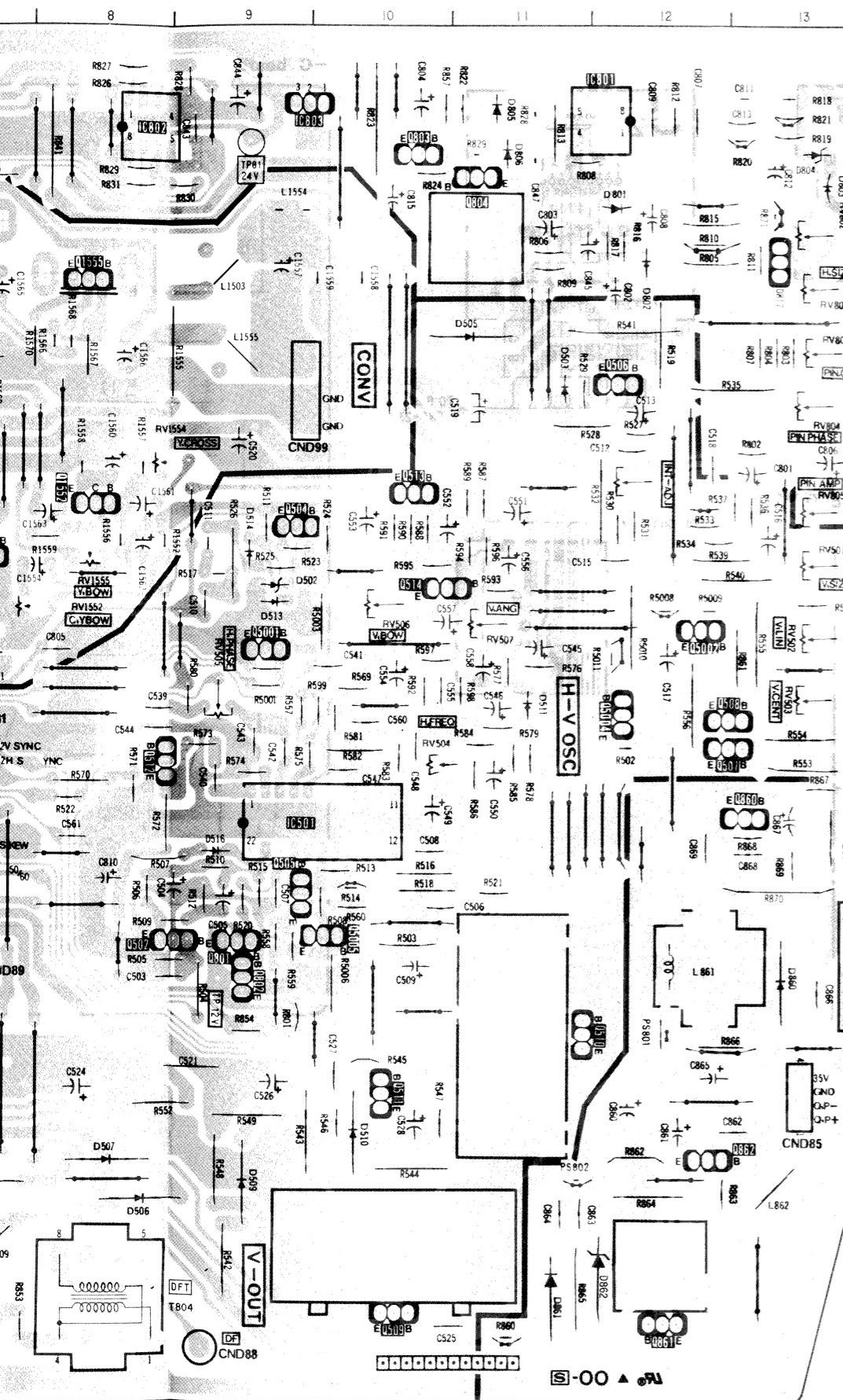


D BOARD I

NOTE:
The circuit indicated as left contains high 600 Vp-p. Care must be paid to prevent a inspection or repairing.

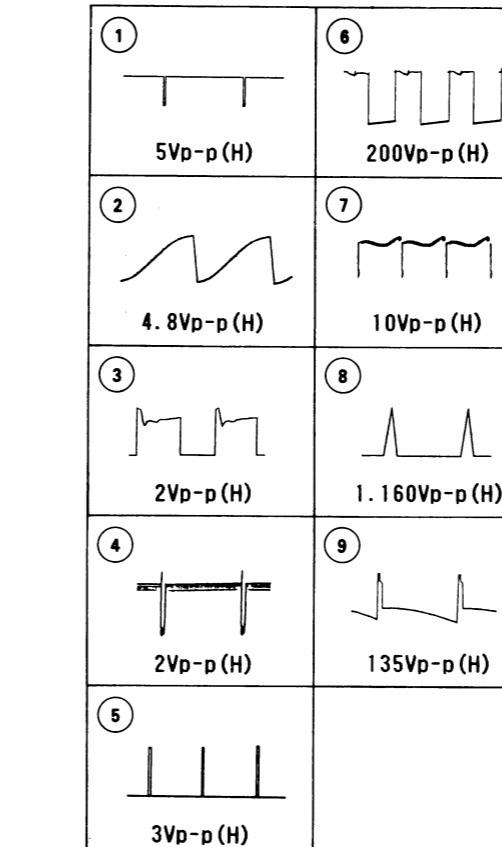
OUT]

D

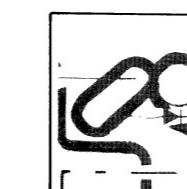
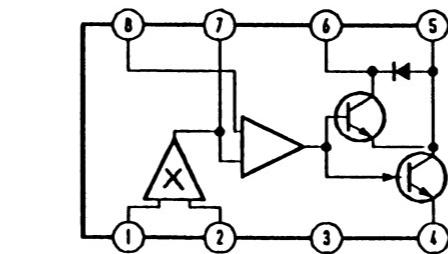


IC		D511
IC501	F-9	D513
IC503	F-6	D514
IC801	A-12	D515
IC802	A-8	D516
IC803	A-9	D801
TRANSISTOR		D802
Q502	G-8	D803
Q504	D-9	D805
Q505	G-9	D806
Q506	C-12	D807
Q507	F-12	D808
Q508	E-12	D809
Q509	J-10	D810
Q510	H-11	D811
Q511	H-10	D812
Q512	F-8	D813
Q513	D-10	D814
Q514	E-10	D815
Q801	G-9	D816
Q802	G-9	D860
Q803	A-10	D861
Q804	B-11	D862
Q805	B-6	VARIAB RESIST
Q806	E-3	RV501
Q860	F-13	RV502
Q861	J-12	RV503
Q862	I-12	RV504
Q5001	E-9	RV505
Q5002	E-12	RV506
Q5004	E-12	RV507
Q5005	G-10	RV801
DIODE		RV802
D502	D-9	RV803
D503	C-11	RV804
D505	C-11	RV805
D506	I-8	
D507	I-8	
D508	H-7	
D509	I-9	
D510	H-10	

● D BOARD WAVEFOR



D BOARD IC801 TEA203



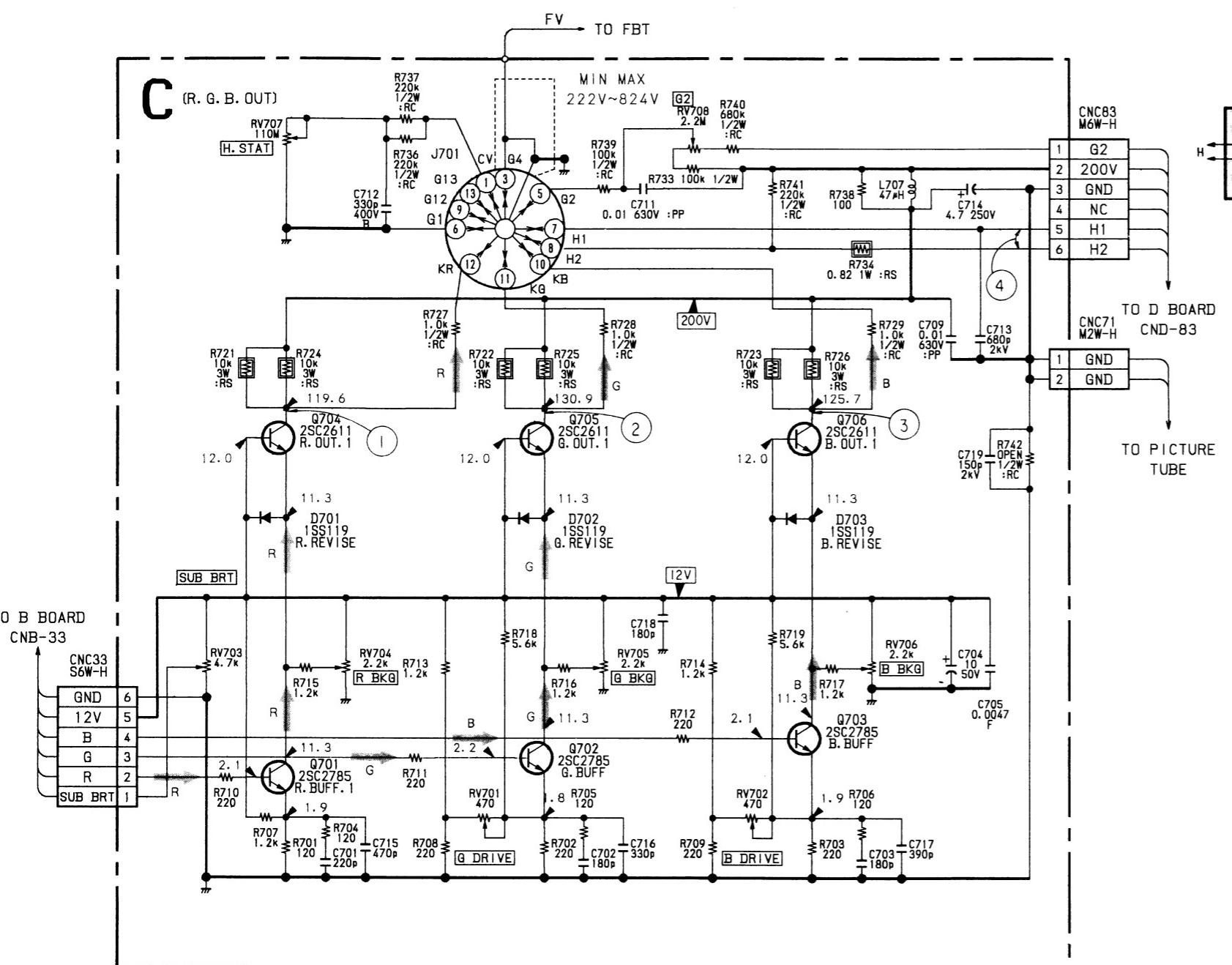
N

The circuit indicated as left contains high voltage of c. 600 Vp-p. Care must be paid to prevent an electric shock during inspection or repairing.

SCHEMATIC DIAGRAM (8)

1 2 3 4 5 6 7 8 9 10 11 12 13 14

A



7 | 8 | 9 | 10 | 11 | 12 | 13 | 14

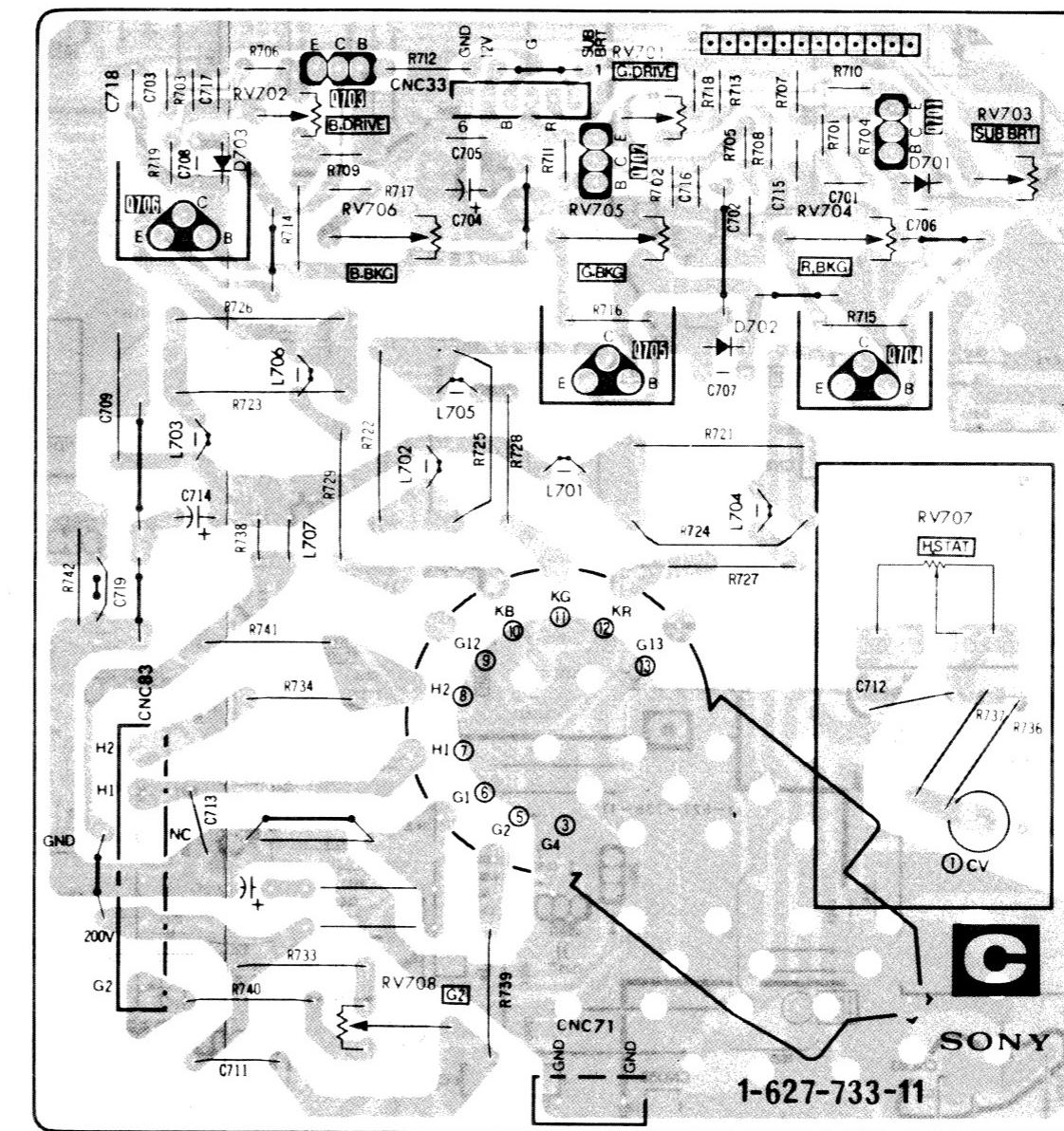
C

[R. G. B. OUT]

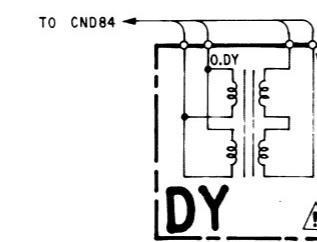
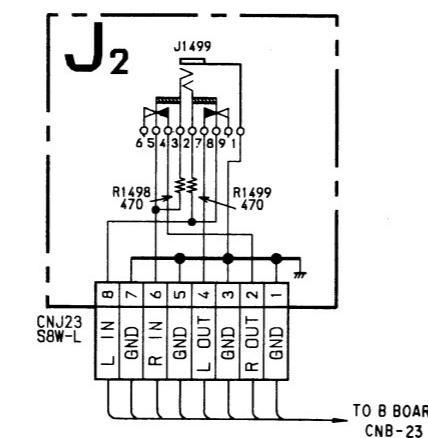
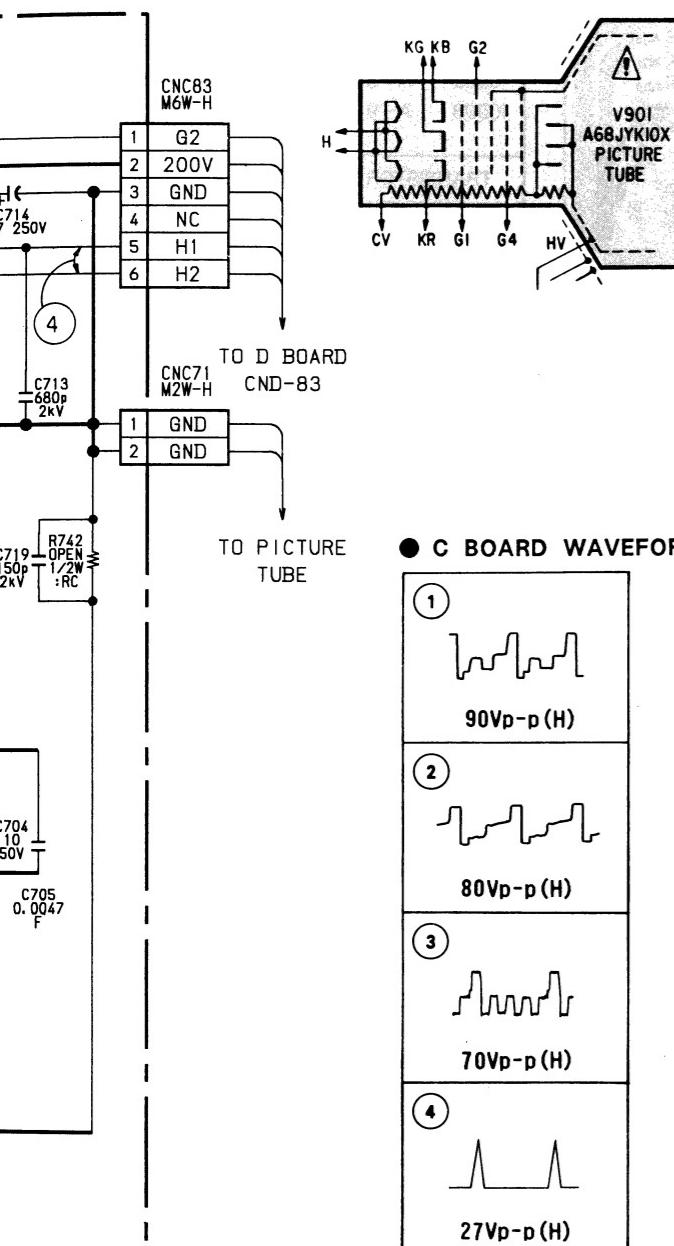
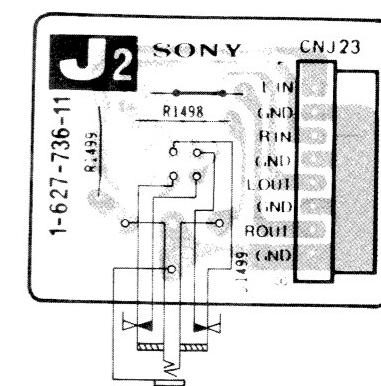
J2

PRINTED WIRING BOARDS (8)

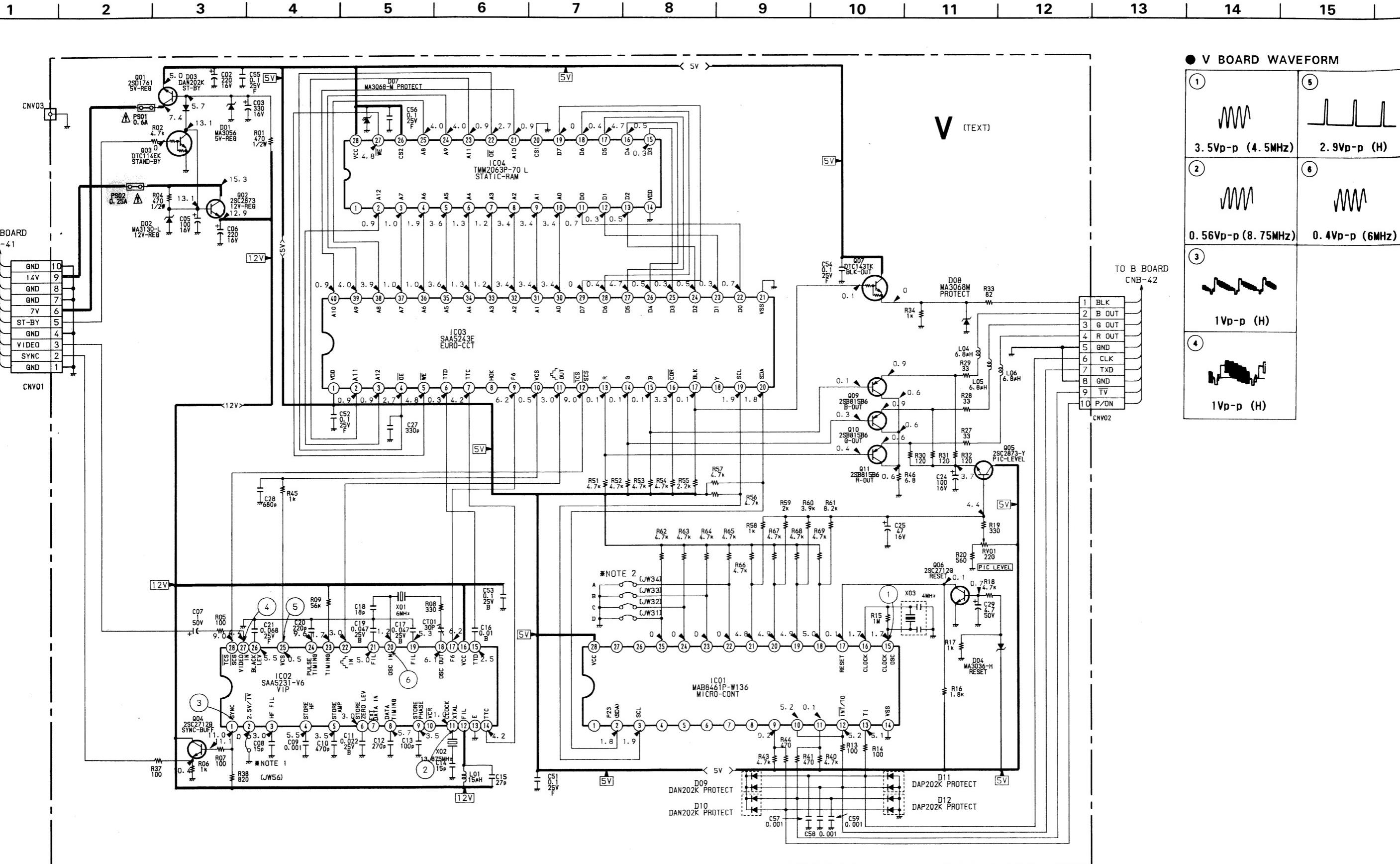
-C board-



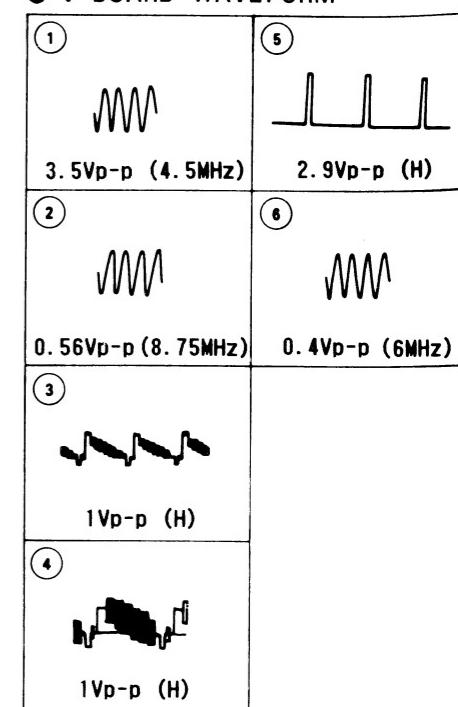
-J2 board-



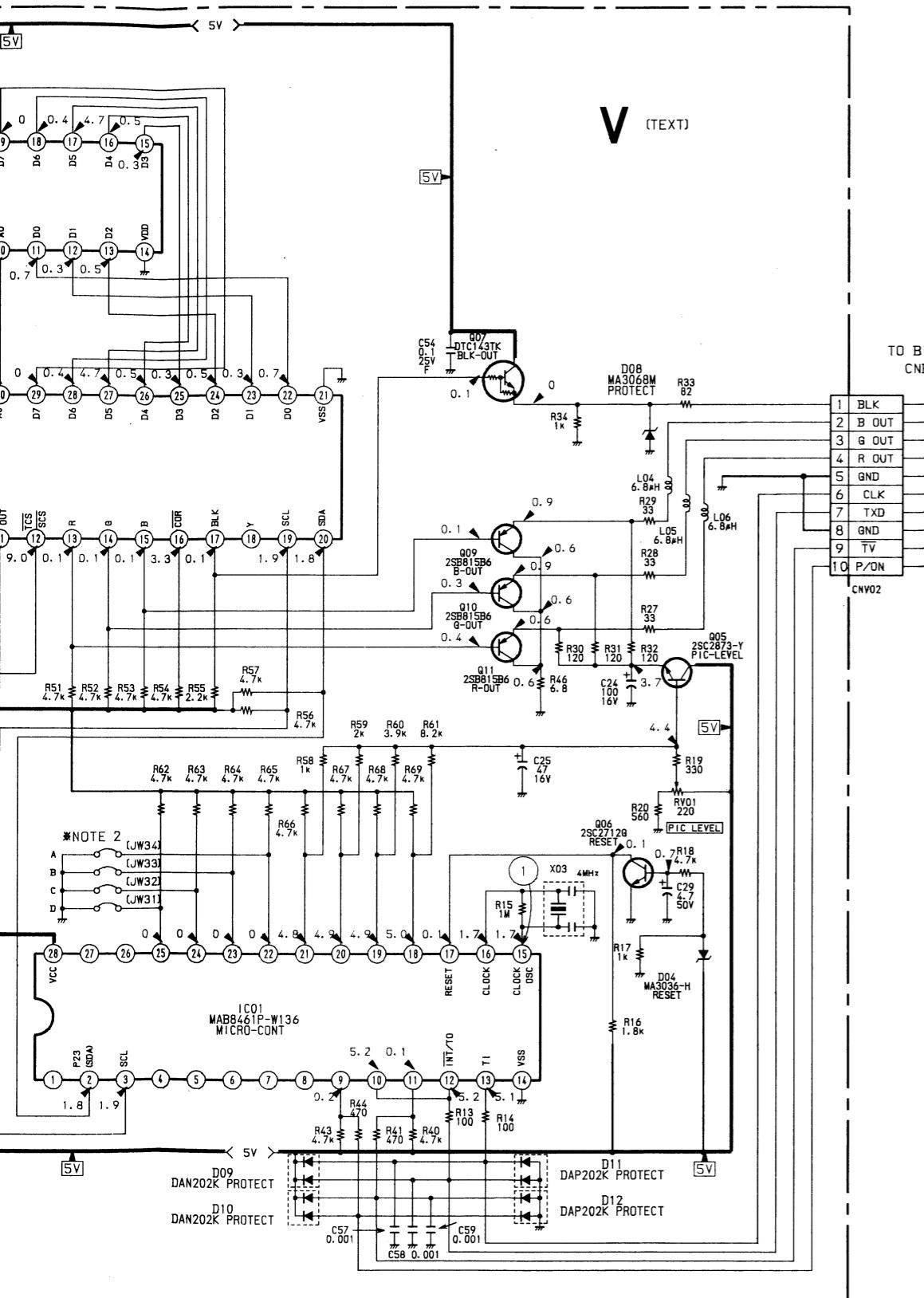
SCHEMATIC DIAGRAM (9)



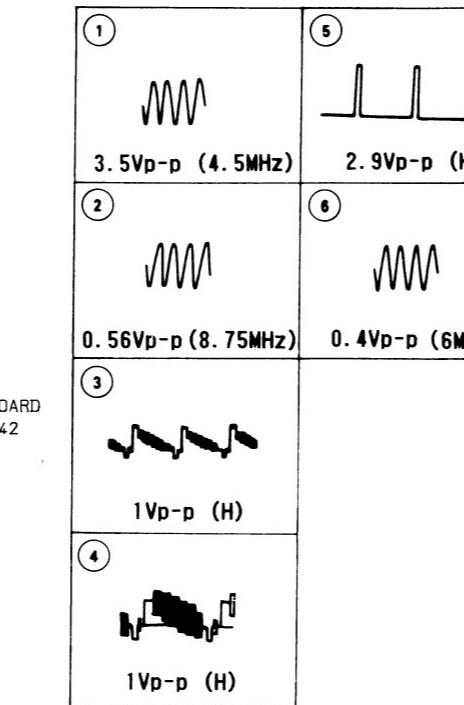
● V BOARD WAVEFORM



7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |

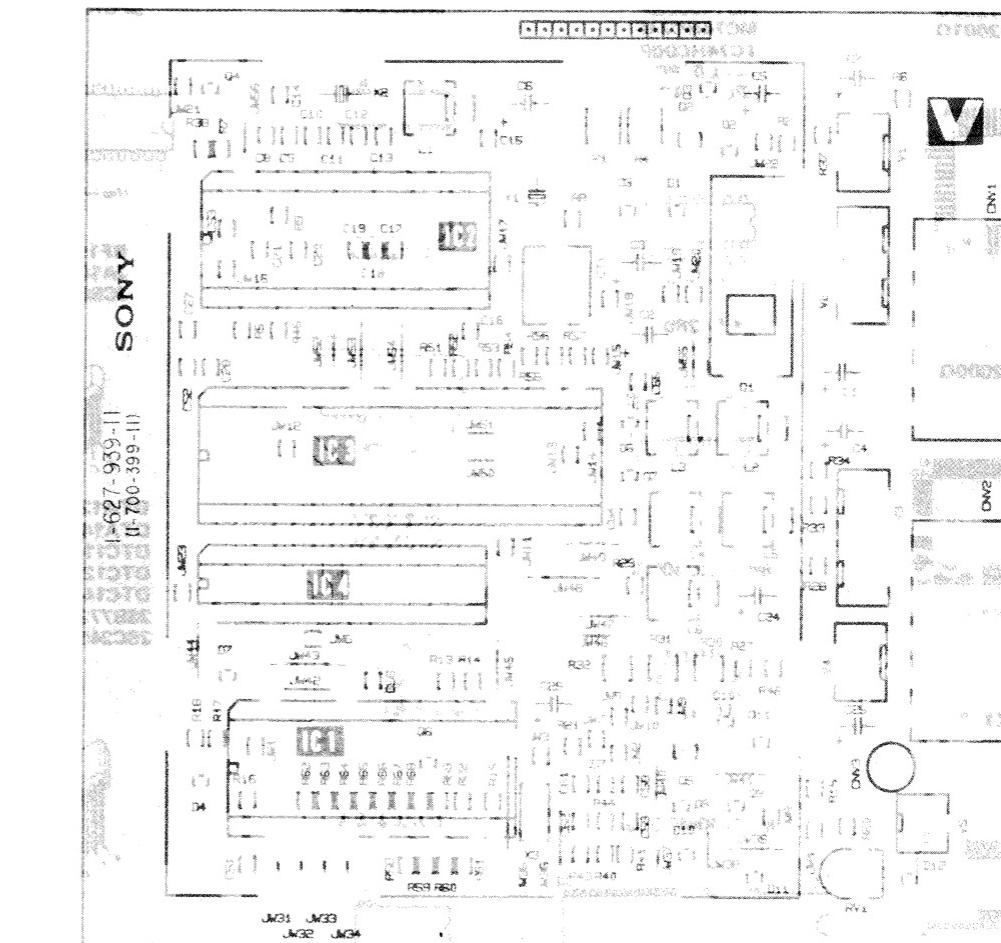


● V BOARD WAVEFORM



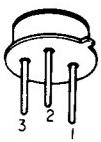
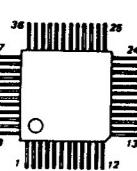
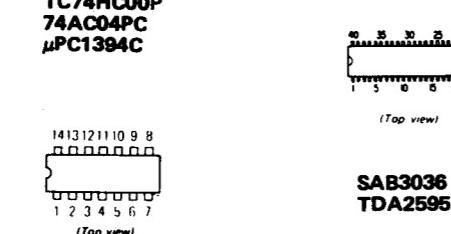
PRINTED WIRING BOARD (9)

—V board—

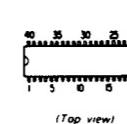
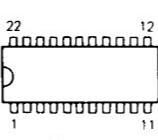
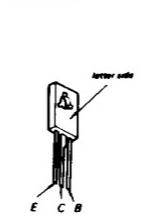


5-5. SEMICONDUCTORS

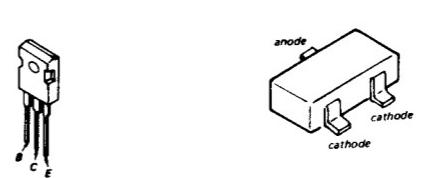
BX1393

CXA1260Q
CXD2001QHD14066BP
MC74HC74F
TC74HC00P
74AC04PC
 μ PC1394C

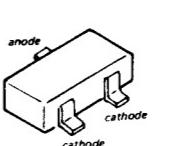
SAA5243E

 μ PC1377C2SA1220A
2SC2611
2SC2688
2SD882

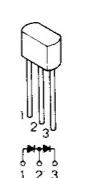
2SC3996



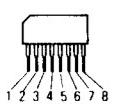
DAN202K



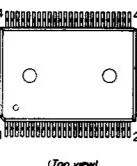
MC931



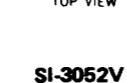
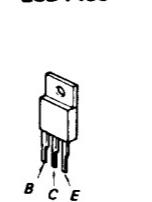
CX20061



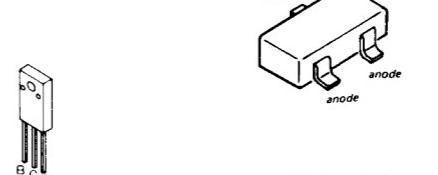
CXD2000Q



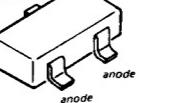
LA4280

BF199
JA101
JC5012SA1667
2SC4381
2SD795E
2SD1406

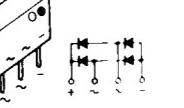
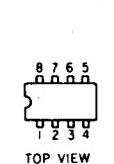
2SC3298



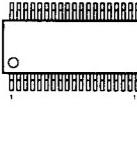
DAP202K



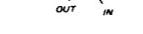
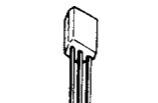
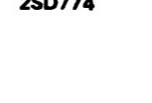
SIVB10S

CX23025
PCD8582
TBA129
TEA2014A
TEA2031A
 μ PC4558C

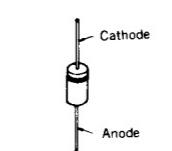
CXK1206



MC74HC4053F

SI-3052V
SI-3122VDTA124ES
DTA144ES
DTC114ES
DTC124ES
DTC144ES
2SB772
2SC24582SB734
2SC2958
2SD774

2SK108

ERD08-15
ERD28-06
ES1F
GP08D
RGP01-17
RGP10G
RGP15GV19E
V30NCXA1096M
CXA1114P
CXA1216P
MA8461P-W136
SAA5231-V6
TDA4555-V8
TDA6200
TMM2063P-70

DM-38

NJM7809A
 μ PC7812H

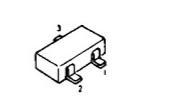
TL431CLPB

DTC114EK
DTC143TK
2SB815
2SC2712

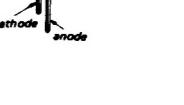
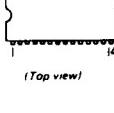
2SC1761

1SS119
1SS133
RD3.9ES-B3
RD3.9ES-L1
RD4.3ES-B2
RD4.7ES-B3
RD5.1ES-B2
RD6.8ES-B2
RD7.5ES-B3
RD9.1ES-B3
RD33ES-B3

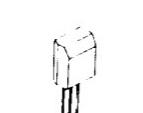
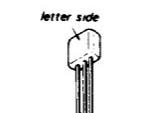
KBU4L



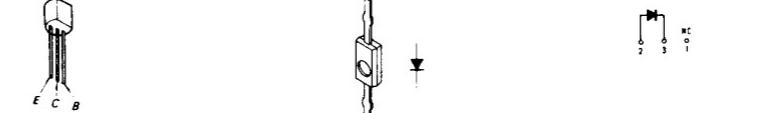
TLUR144

HD14040BP
TC4052BP

NJM78L24A

 μ PC78L12
 μ PC78L12J2SA1175
2SC27852SC2060
2SD788

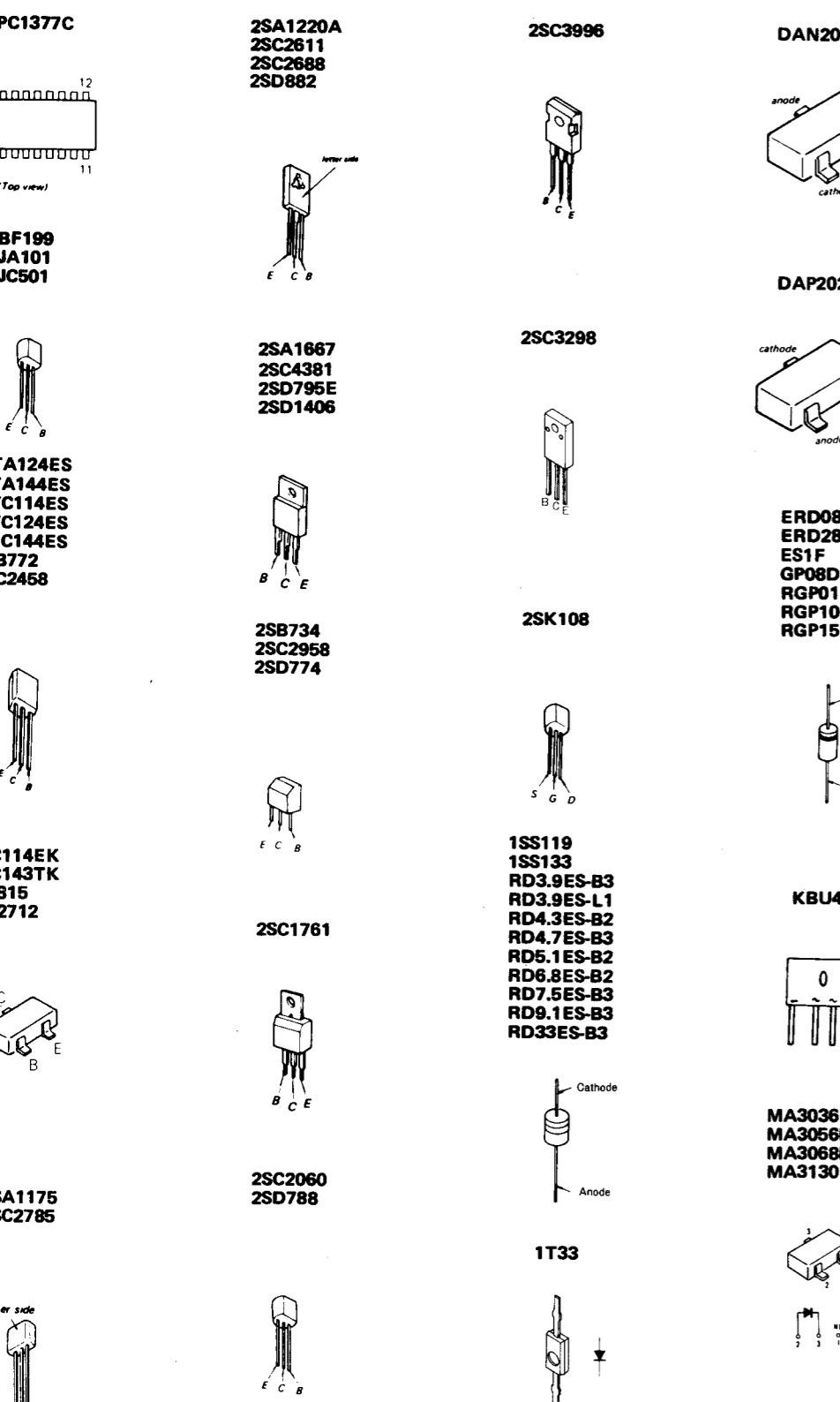
1T33

MA3036H-TX
MA3056M-TX
MA3068M-TX
MA3130L-TX

REF. NO. PART N

- 1 *A-1245
2 A-4-389
3 A-1-574
4 4-302-
5 A-1-230-
6 *1-627-
7 A-1-439-
8 *A-1345-
9 3-701-
10 A-1-238-
11 4-386-
12 *A-1296-
13 A-1-465-

SECTION 6 EXPLODED VIEWS



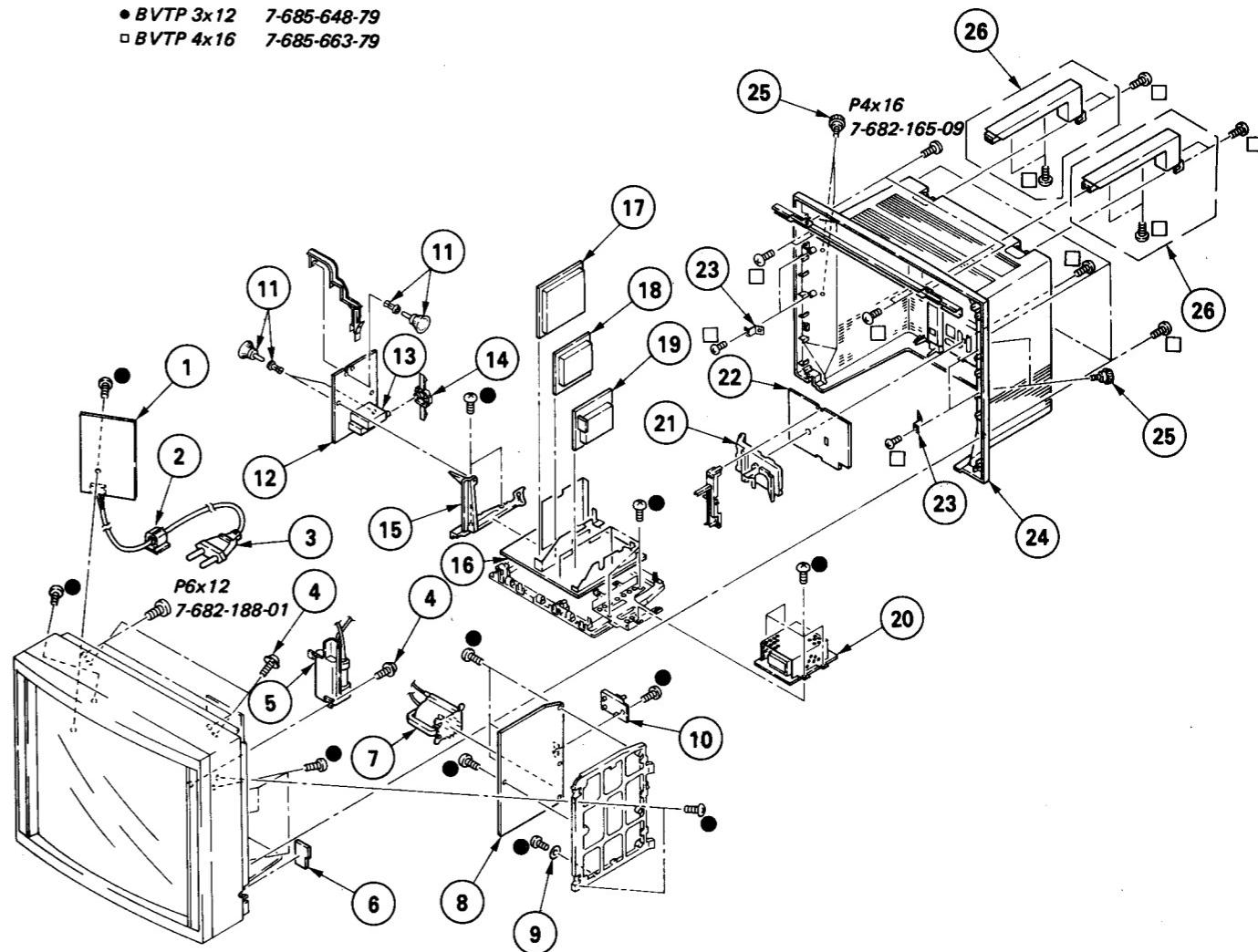
NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark ▲ are critical for safety. Replace only with part number specified.

6-1. CHASSIS

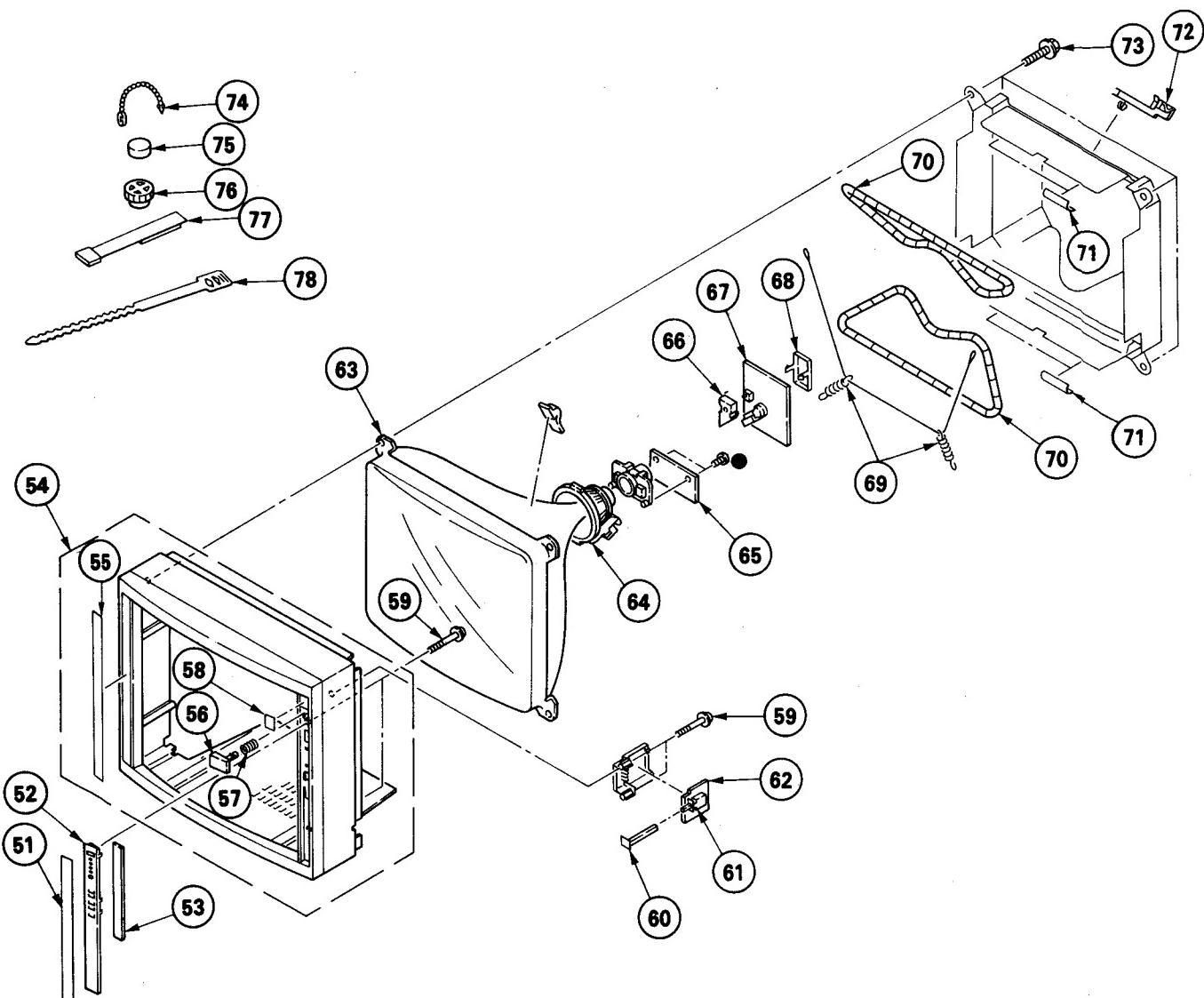
- BVTP 3x12 7-685-648-79
- BVTP 4x16 7-685-663-79



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
1	*A-1245-436-A	F2 BOARD, COMPLETE		14	*4-386-617-01	HOLDER, TERMINAL	
2	▲ 4-389-201-01	HOLDER, AC CORD	▲	15	*4-386-629-12	BRACKET, A	
3	▲ 1-574-299-11	CORD, POWER (WITH CONNECTOR)	▲	16	*A-1135-521-A	B BOARD, COMPLETE	
4	4-302-934-00	HEAD, WASHER, TAPPING SCREW		17	*A-1275-093-A	Q BOARD, COMPLETE	
5	▲ 1-230-940-31	RESISTOR ASSY, HIGH-VOLTAGE	▲	18	*A-1347-031-A	V BOARD, COMPLETE	
6	*1-627-736-11	J2 BOARD		19	*A-1135-526-A	B1 BOARD, COMPLETE	
7	▲ 1-439-443-11	TRANSFORMER ASSY, FLYBACK	▲	20	1-413-380-11	REGULATOR, SWITCHING (ZD-109)	
8	*A-1345-798-A	D BOARD, COMPLETE		21	*4-386-624-11	BRACKET, J	
9	3-701-418-00	WASHER, SPECIAL		22	*A-1388-080-A	J1 BOARD, COMPLETE	
10	▲ 1-238-368-11	RESISTOR ASSY, HIGH-VOLTAGE	▲	23	4-390-735-01	BRACKET, SPEAKER	
11	4-386-618-01	RIVET, T TYPE		24	4-390-723-01	COVER, REAR	
12	*A-1296-497-A	A BOARD, COMPLETE		25	X-4374-104-1	SCREW (B) ASSY, ORNAMENTAL	
13	▲ 1-465-059-11	TUNER, ET (UV-616S)	▲	26	X-4390-706-1	HANDLE ASSY	

6-2. PICTURE TUBE

• BVTP 3x12 7-685-648-79



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
51	4-390-734-01	LABEL (B) (R)		65	*A-1342-071-A	VM BOARD, COMPLETE	
52	4-390-714-01	BRACKET, H PC BOARD		66	*4-379-167-01	COVER (MAIN), CV	
53	*1-627-728-11	H BOARD		67	*A-1330-901-A	C BOARD, COMPLETE	
54	X-4390-701-1	BEZNET ASSY	55-58	68	*4-379-160-01	COVER (REAR LID), CV	
55	4-390-733-01	LABEL (L)		69	4-369-318-00	SPRING, TENSION	
56	4-390-704-01	BUTTON, POWER		70	Δ 1-426-398-11	COIL, DEMAGNETIZATION	
57	3-666-528-00	SPRING, COMPRESSION		71	*4-860-518-11	PACKING, TWEETER	
58	4-390-732-01	LABEL (A) (R)		72	*4-387-216-01	HOLDER, LEAD	
59	4-319-520-11	SCREW, SPECIAL (+PW4X30)		73	4-373-263-11	SCREW (M), PT	
60	4-390-705-01	SHAFT, BUTTON		74	4-308-870-00	CLIP, LEAD WIRE	
61	Δ 1-571-433-11	SWITCH, PUSH (AC POWER)		75	1-452-032-00	MAGNET, DISK; 10MM ϕ	
62	*1-627-734-11	F1 BOARD		76	1-452-094-00	MAGNET, ROTATABLE DISK; 15M ϕ	
63	Δ 8-733-821-05	PICTURE TUBE (A68JYK10X)		77	X-4309-608-0	PERMALLOY ASSY, CONVERGENCE BAND, BINDING	
64	Δ 1-451-333-11	DEFLECTION YOKE (SY-191B)		78	3-701-007-00		

B

NOTE:

The components identified by shading and mark **A** are critical for safety.
Replace only with part number specified.

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

When indicating parts by reference number, please include the board name.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

CAPACITORS

• MF : μ F, PF : $\mu\mu$ F

COILS

• MMH : mH, UH : μ H

RESISTORS

- All resistors are in ohms
- F : nonflammable

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
	*A-1135-521-A	B BOARD, COMPLETE	*****	C346	1-136-153-00	MYLAR	0.01MF 10%
				C347	1-130-479-00	MYLAR	0.0047MF 10%
				C348	1-124-499-11	ELECT	1MF 20%
				C349	1-136-153-00	MYLAR	0.01MF 10%
		<CAPACITOR>		C350	1-124-927-11	ELECT	4.7MF 20%
C001	1-124-477-11	ELECT	47MF 20% 16V	C351	1-124-499-11	ELECT	1MF 20%
C002	1-102-129-00	CERAMIC	0.01MF 10% 50V	C352	1-124-927-11	ELECT	4.7MF 20%
C003	1-102-824-00	CERAMIC	470PF 5% 50V	C353	1-130-481-00	MYLAR	0.0068MF 10%
C004	1-124-477-11	ELECT	47MF 20% 16V	C354	1-130-476-00	MYLAR	0.0027MF 10%
C005	1-102-951-00	CERAMIC	15PF 5% 50V	C355	1-130-477-00	MYLAR	0.0033MF 10%
C006	1-102-947-00	CERAMIC	10PF 0.5PF 50V	C401	1-126-320-11	ELECT	10MF 20%
C007	1-130-477-00	MYLAR	0.0033MF 10% 50V	C402	1-126-320-11	ELECT	10MF 20%
C009	1-124-927-11	ELECT	4.7MF 20% 50V	C403	1-126-320-11	ELECT	10MF 20%
C010	1-124-927-11	ELECT	4.7MF 20% 50V	C404	1-124-477-11	ELECT	47MF 20%
C011	1-124-927-11	ELECT	4.7MF 20% 50V	C406	1-136-165-00	FILM	0.1MF 5%
C012	1-124-927-11	ELECT	4.7MF 20% 50V	C407	1-136-165-00	FILM	0.1MF 5%
C013	1-101-361-00	CERAMIC	150PF 5% 50V	C408	1-136-165-00	FILM	0.1MF 5%
C014	1-136-165-00	FILM	0.1MF 5% 50V	C409	1-123-875-11	ELECT	10MF 20%
C015	1-136-165-00	FILM	0.1MF 5% 50V	C410	1-124-477-11	ELECT	47MF 20%
C016	1-102-980-00	CERAMIC	270PF 5% 50V	C415	1-136-165-00	FILM	0.1MF 5%
C017	1-124-360-00	ELECT	1000MF 20% 16V	C416	1-136-165-00	FILM	0.1MF 5%
C018	1-124-478-11	ELECT	100MF 20% 25V	C417	1-136-165-00	FILM	0.1MF 5%
C019	1-124-477-11	ELECT	47MF 20% 16V	C418	1-124-463-00	ELECT	0.1MF 20%
C021	1-124-360-00	ELECT	1000MF 20% 16V	C419	1-124-477-11	ELECT	47MF 20%
C022	1-124-927-11	ELECT	4.7MF 20% 50V	C420	1-126-101-11	ELECT	100MF 20%
C027	1-123-875-11	ELECT	10MF 20% 50V	C421	1-102-953-00	CERAMIC	18PF 5%
C028	1-101-004-00	CERAMIC	0.01MF 50V	C422	1-123-875-11	ELECT	10MF 20%
C029	1-130-477-00	MYLAR	0.0033MF 10% 50V	C423	1-124-477-11	ELECT	47MF 20%
C030	1-102-111-00	CERAMIC	270PF 10% 50V	C424	1-124-477-11	ELECT	47MF 20%
C031	1-123-875-11	ELECT	10MF 20% 50V	C427	1-123-875-11	ELECT	10MF 20%
C045	1-124-463-00	ELECT	0.1MF 20% 50V	C432	1-123-875-11	ELECT	10MF 20%
C251	1-102-074-00	CERAMIC	0.001MF 10% 50V	C434	1-124-477-11	ELECT	47MF 20%
C252	1-124-927-11	ELECT	4.7MF 20% 50V	C435	1-124-477-11	ELECT	47MF 20%
C253	1-124-910-11	ELECT	47MF 20% 50V	C4001	1-123-875-11	ELECT	10MF 20%
C254	1-136-165-00	FILM	0.1MF 5% 50V	C4002	1-126-101-11	ELECT	100MF 20%
C255	1-126-105-11	ELECT	1000MF 20% 35V	C4003	1-124-902-00	ELECT	0.47MF 20%
C256	1-136-167-00	FILM	0.15MF 5% 50V	C4004	1-124-902-00	ELECT	0.47MF 20%
C261	1-102-074-00	CERAMIC	0.001MF 10% 50V	C4005	1-124-902-00	ELECT	0.47MF 20%
C262	1-124-927-11	ELECT	4.7MF 20% 50V	C4006	1-124-464-11	ELECT	0.22MF 20%
C263	1-124-910-11	ELECT	47MF 20% 50V	C4007	1-124-464-11	ELECT	0.22MF 20%
C264	1-136-165-00	FILM	0.1MF 5% 50V	C4008	1-124-464-11	ELECT	0.22MF 20%
C265	1-126-105-11	ELECT	1000MF 20% 35V	C4009	1-102-816-00	CERAMIC	120PF 5%
C266	1-136-167-00	FILM	0.15MF 5% 50V	C4010	1-102-959-00	CERAMIC	22PF 5% 50V
C271	1-124-122-11	ELECT	100MF 20% 50V	C4011	1-126-233-11	ELECT	22MF 20% 50V
C272	1-124-913-11	ELECT	470MF 20% 50V	C4012	1-136-165-00	FILM	0.1MF 5% 50V
C273	1-136-165-00	FILM	0.1MF 5% 50V	C4013	1-101-884-00	CERAMIC	56PF 5% 50V
C340	1-124-477-11	ELECT	47MF 20% 16V	C4014	1-136-153-00	MYLAR	0.01MF 10% 50V
C341	1-136-157-00	MYLAR	0.022MF 10% 50V	C4015	1-102-978-00	CERAMIC	220PF 5% 50V
C342	1-130-471-00	MYLAR	0.001MF 10% 50V	C4016	1-123-875-11	ELECT	10MF 20% 50V
C344	1-130-471-00	MYLAR	0.001MF 10% 50V	C4017	1-101-004-00	CERAMIC	0.01MF 20% 50V
C345	1-136-169-00	FILM	0.22MF 5% 50V	C4018	1-124-499-11	ELECT	1MF 20% 50V

B

The components identified by shading and mark **A** are critical for safety.
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK		
C4019	1-101-004-00	CERAMIC	0.01MF	50V	D407	8-719-109-81	DIODE RD4.7ES-B2		
C4020	1-123-875-11	ELECT	10MF	20%	D408	8-719-911-19	DIODE 1SS119		
C4021	1-124-477-11	ELECT	47MF	20%	D411	8-719-911-19	DIODE 1SS119		
C4022	1-124-499-11	ELECT	1MF	20%	D412	8-719-911-19	DIODE 1SS119		
C4023	1-102-112-00	CERAMIC	330PF	10%	D413	8-719-911-19	DIODE 1SS119		
C4024	1-126-101-11	ELECT	100MF	20%	16V	D415	8-719-911-19	DIODE 1SS119	
C4030	1-124-499-11	ELECT	1MF	20%	50V	D416	8-719-911-19	DIODE 1SS119	
C4031	1-124-499-11	ELECT	1MF	20%	50V	D417	8-719-911-19	DIODE 1SS119	
C4032	1-124-499-11	ELECT	1MF	20%	50V	D4001	8-719-911-19	DIODE 1SS119	
					D4002	8-719-911-19	DIODE 1SS119		
<FILTER>									
CF001	1-567-686-11	OSCILLATOR, CERAMIC			D4003	8-719-911-19	DIODE 1SS119		
					D4029	8-719-911-19	DIODE 1SS119		
					D4030	8-719-911-19	DIODE 1SS119		
<CONNECTOR>									
CNB01	*1-564-511-11	PLUG, CONNECTOR 8P							
CNB02	*1-564-508-11	PLUG, CONNECTOR 5P							
CNB03	*1-566-367-11	CONNECTOR, HINGE (RECEPTACLE)							
CNB11	*1-566-660-11	CONNECTOR, HINGE (PLUG) 18P							
CNB13	*1-564-881-11	PLUG, CONNECTOR 4P							
CNB21	*1-566-367-11	CONNECTOR, HINGE (RECEPTACLE)							
CNB23	*1-564-511-11	PLUG, CONNECTOR 8P							
CNB31	*1-565-501-11	CONNECTOR, BOARD TO BOARD 10P							
CNB32	*1-565-501-11	CONNECTOR, BOARD TO BOARD 10P							
CNB33	*1-564-509-11	PLUG, CONNECTOR 6P							
CNB41	*1-565-394-11	PIN, BOARD TO BOARD CONNECTOR							
CNB42	*1-565-394-11	PIN, BOARD TO BOARD CONNECTOR							
CNB43	*1-565-509-11	CONNECTOR, BOARD TO BOARD 18P							
CNB44	*1-565-509-11	CONNECTOR, BOARD TO BOARD 18P							
CNB60	*1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P							
CNB62	*1-564-507-11	PLUG, CONNECTOR 4P							
CNB63	*1-564-509-11	PLUG, CONNECTOR 6P							
CNB81	*1-564-513-11	PLUG, CONNECTOR 10P							
CNB83	*1-564-506-11	PLUG, CONNECTOR 3P							
CNB89	*1-564-882-11	PLUG, CONNECTOR 5P							
<DIODE>									
D001	8-719-120-17	DIODE RD3.9ES-L1							
D002	8-719-911-19	DIODE 1SS119							
D003	8-719-911-19	DIODE 1SS119							
D004	8-719-911-19	DIODE 1SS119							
D005	8-719-911-19	DIODE 1SS119							
D006	8-719-911-19	DIODE 1SS119							
D007	8-719-110-80	DIODE RD33ES-B4							
D008	8-719-911-19	DIODE 1SS119							
D009	8-719-911-19	DIODE 1SS119							
D011	8-719-911-19	DIODE 1SS119							
D012	8-719-911-19	DIODE 1SS119							
D271	8-719-110-14	DIODE RD9.1ES-B3							
D341	8-719-911-19	DIODE 1SS119							
D342	8-719-911-19	DIODE 1SS119							
D344	8-719-120-14	DIODE RD3.9ES-L1							
D347	8-719-911-19	DIODE 1SS119							
D348	8-719-911-19	DIODE 1SS119							
D371	8-719-936-83	DIODE GP08DPKG23							
D381	8-719-911-19	DIODE 1SS119							
D401	8-719-110-04	DIODE RD7.5ES-B3							
D402	8-719-110-04	DIODE RD7.5ES-B3							
D403	8-719-110-04	DIODE RD7.5ES-B3							
D404	8-719-911-19	DIODE 1SS119							
D405	8-719-911-19	DIODE 1SS119							
D406	8-719-911-19	DIODE 1SS119							
<COIL>									
L001	1-410-478-11	INDUCTOR							
L002	1-410-471-11	INDUCTOR							
L003	1-408-225-00	INDUCTOR							
L027	1-410-478-11	INDUCTOR							
L4001	1-408-411-00	INDUCTOR							
<IC LINK>									
PS001A 1-532-637-91 LINK, IC									
<TRANSISTOR>									
Q001	8-729-117-54	TRANSISTOR 2SA1175							
Q002	8-729-178-54	TRANSISTOR 2SC2785							
Q003	8-729-117-54	TRANSISTOR 2SA1175							
Q004	8-729-117-54	TRANSISTOR 2SA1175							
Q005	8-729-900-65	TRANSISTOR DTA144ES							
Q271	8-729-900-36	TRANSISTOR DTC124ES							
Q340	8-729-178-54	TRANSISTOR 2SC2785							
Q341	8-729-178-54	TRANSISTOR 2SC2785							
Q342	8-729-178-54	TRANSISTOR 2SC2785							
Q343	8-729-178-54	TRANSISTOR 2SC2785							
Q344	8-729-178-54	TRANSISTOR 2SC2785							
Q345	8-729-178-54	TRANSISTOR 2SC2785							
Q380	8-729-178-54	TRANSISTOR 2SC2785							
Q381	8-729-178-54	TRANSISTOR 2SC2785							
Q382	8-729-900-89	TRANSISTOR DTC144ES							
Q383	8-729-900-89	TRANSISTOR DTC144ES							
Q401	8-729-178-54	TRANSISTOR 2SC2785							

B

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
Q402	8-729-178-54	TRANSISTOR 2SC2785		R031	1-249-429-11	CARBON	10K 5% 1/4W
Q403	8-729-178-54	TRANSISTOR 2SC2785		R032	1-249-429-11	CARBON	10K 5% 1/4W
Q404	8-729-178-54	TRANSISTOR 2SC2785		R033	1-249-429-11	CARBON	10K 5% 1/4W
Q405	8-729-178-54	TRANSISTOR 2SC2785		R037	1-249-417-11	CARBON	1K 5% 1/4W
Q406	8-729-178-54	TRANSISTOR 2SC2785		R038	1-249-417-11	CARBON	1K 5% 1/4W
Q407	8-729-178-54	TRANSISTOR 2SC2785		R039	1-249-417-11	CARBON	1K 5% 1/4W
Q408	8-729-117-54	TRANSISTOR 2SA1175		R040	1-249-417-11	CARBON	1K 5% 1/4W
Q409	8-729-178-54	TRANSISTOR 2SC2785		R041	1-249-417-11	CARBON	1K 5% 1/4W
Q410	8-729-178-54	TRANSISTOR 2SC2785		R042	1-249-417-11	CARBON	1K 5% 1/4W
Q411	8-729-178-54	TRANSISTOR 2SC2785		R043	1-249-413-11	CARBON	470 5% 1/4W
Q412	8-729-178-54	TRANSISTOR 2SC2785		R044	1-249-413-11	CARBON	470 5% 1/4W
Q415	8-729-178-54	TRANSISTOR 2SC2785		R045	1-249-411-11	CARBON	330 5% 1/4W
Q418	8-729-178-54	TRANSISTOR 2SC2785		R046	1-249-429-11	CARBON	10K 5% 1/4W
Q419	8-729-117-54	TRANSISTOR 2SA1175		R047	1-249-429-11	CARBON	10K 5% 1/4W
Q420	8-729-178-54	TRANSISTOR 2SC2785		R048	1-249-429-11	CARBON	10K 5% 1/4W
Q421	8-729-117-54	TRANSISTOR 2SA1175		R049	1-249-429-11	CARBON	10K 5% 1/4W
Q422	8-729-178-54	TRANSISTOR 2SC2785		R050	1-249-429-11	CARBON	10K 5% 1/4W
Q423	8-729-117-54	TRANSISTOR 2SA1175		R051	1-249-429-11	CARBON	10K 5% 1/4W
Q424	8-729-178-54	TRANSISTOR 2SC2785		R052	1-249-429-11	CARBON	10K 5% 1/4W
Q425	8-729-178-54	TRANSISTOR 2SC2785		R053	1-249-429-11	CARBON	10K 5% 1/4W
Q431	8-729-178-54	TRANSISTOR 2SC2785		R054	1-249-413-11	CARBON	470 5% 1/4W
Q4001	8-729-178-54	TRANSISTOR 2SC2785		R055	1-249-413-11	CARBON	470 5% 1/4W
Q4004	8-729-117-54	TRANSISTOR 2SA1175		R056	1-249-429-11	CARBON	10K 5% 1/4W
Q4005	8-729-178-54	TRANSISTOR 2SC2785		R057	1-249-429-11	CARBON	10K 5% 1/4W
Q4006	8-729-178-54	TRANSISTOR 2SC2785		R058	1-249-429-11	CARBON	10K 5% 1/4W
Q4007	8-729-178-54	TRANSISTOR 2SC2785		R059	1-249-417-11	CARBON	1K 5% 1/4W
Q4008	8-729-178-54	TRANSISTOR 2SC2785		R060	1-249-417-11	CARBON	1K 5% 1/4W
Q4009	8-729-178-54	TRANSISTOR 2SC2785		R061	1-249-413-11	CARBON	470 5% 1/4W
Q4011	8-729-600-12	TRANSISTOR 2SK108		R062	1-249-423-11	CARBON	3.3K 5% 1/4W
Q4019	8-729-178-54	TRANSISTOR 2SC2785		R063	1-249-435-11	CARBON	33K 5% 1/4W
Q4024	8-729-600-12	TRANSISTOR 2SK108		R064	1-249-441-11	CARBON	100K 5% 1/4W
Q4027	8-729-117-54	TRANSISTOR 2SA1175		R065	1-249-425-11	CARBON	4.7K 5% 1/4W
Q4028	8-729-178-54	TRANSISTOR 2SC2785		R066	1-249-425-11	CARBON	4.7K 5% 1/4W
Q4029	8-729-178-54	TRANSISTOR 2SC2785		R067	1-249-425-11	CARBON	4.7K 5% 1/4W
Q4033	8-729-900-36	TRANSISTOR DTC124ES		R068	1-249-431-11	CARBON	15K 5% 1/4W
Q4045	8-729-900-63	TRANSISTOR DTA124ES		R069	1-249-429-11	CARBON	10K 5% 1/4W
<RESISTOR>							
R001	1-249-413-11	CARBON	470 5% 1/4W	R070	1-249-421-11	CARBON	2.2K 5% 1/4W
R002	1-249-431-11	CARBON	15K 5% 1/4W	R071	1-249-413-11	CARBON	470 5% 1/4W
R003	1-249-425-11	CARBON	4.7K 5% 1/4W	R072	1-249-413-11	CARBON	470 5% 1/4W
R005	1-249-429-11	CARBON	10K 5% 1/4W	R073	1-249-417-11	CARBON	1K 5% 1/4W
R007	1-249-429-11	CARBON	10K 5% 1/4W	R074	1-249-427-11	CARBON	6.8K 5% 1/4W
R008	1-249-429-11	CARBON	10K 5% 1/4W	R076	1-249-437-11	CARBON	47K 5% 1/4W
R009	1-249-429-11	CARBON	10K 5% 1/4W	R077	1-249-437-11	CARBON	47K 5% 1/4W
R010	1-249-429-11	CARBON	10K 5% 1/4W	R078	1-249-437-11	CARBON	47K 5% 1/4W
R011	1-249-429-11	CARBON	10K 5% 1/4W	R079	1-249-429-11	CARBON	10K 5% 1/4W
R012	1-249-429-11	CARBON	10K 5% 1/4W	R082	1-249-429-11	CARBON	10K 5% 1/4W
R013	1-249-429-11	CARBON	10K 5% 1/4W	R083	1-249-417-11	CARBON	1K 5% 1/4W
R014	1-249-429-11	CARBON	10K 5% 1/4W	R084	1-249-429-11	CARBON	10K 5% 1/4W
R015	1-249-425-11	CARBON	4.7K 5% 1/4W	R251	1-249-419-11	CARBON	1.5K 5% 1/4W
R016	1-249-417-11	CARBON	1K 5% 1/4W	R252	1-249-423-11	CARBON	3.3K 5% 1/4W
R017	1-249-419-11	CARBON	1.5K 5% 1/4W	R253	1-249-405-11	CARBON	100 5% 1/4W
R019	1-249-432-11	CARBON	18K 5% 1/4W	R254	1-249-385-11	CARBON	2.2 5% 1/4W
R020	1-249-439-11	CARBON	68K 5% 1/4W	R261	1-249-419-11	CARBON	1.5K 5% 1/4W
R021	1-249-429-11	CARBON	10K 5% 1/4W	R262	1-249-423-11	CARBON	3.3K 5% 1/4W
R022	1-249-429-11	CARBON	10K 5% 1/4W	R263	1-249-405-11	CARBON	100 5% 1/4W
R023	1-249-429-11	CARBON	10K 5% 1/4W	R264	1-249-385-11	CARBON	2.2 5% 1/4W
R024	1-249-438-11	CARBON	56K 5% 1/4W	R271	1-249-413-11	CARBON	470 5% 1/4W
R025	1-249-429-11	CARBON	10K 5% 1/4W	R272	1-249-429-11	CARBON	10K 5% 1/4W
R026	1-249-429-11	CARBON	10K 5% 1/4W	R273	1-249-417-11	CARBON	1K 5% 1/4W
R029	1-249-429-11	CARBON	10K 5% 1/4W	R340	1-249-431-11	CARBON	15K 5% 1/4W
R30	1-249-431-11	CARBON	15K 5% 1/4W	R341	1-249-425-11	CARBON	4.7K 5% 1/4W
				R342	1-247-891-00	CARBON	330K 5% 1/4W
				R343	1-249-417-11	CARBON	1K 5% 1/4W

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R344	1-249-425-11	CARBON	4.7K 5% 1/4W	R433	1-249-411-11	CARBON	330 5% 1/4W
R345	1-249-429-11	CARBON	10K 5% 1/4W	R434	1-249-409-11	CARBON	220 5% 1/4W
R346	1-249-425-11	CARBON	4.7K 5% 1/4W	R437	1-249-429-11	CARBON	10K 5% 1/4W
R347	1-249-417-11	CARBON	1K 5% 1/4W	R438	1-249-427-11	CARBON	6.8K 5% 1/4W
R348	1-249-437-11	CARBON	47K 5% 1/4W	R439	1-249-413-11	CARBON	470 5% 1/4W
R349	1-249-429-11	CARBON	10K 5% 1/4W	R440	1-249-409-11	CARBON	220 5% 1/4W
R350	1-249-433-11	CARBON	22K 5% 1/4W	R441	1-249-417-11	CARBON	1K 5% 1/4W
R351	1-249-423-11	CARBON	3.3K 5% 1/4W	R442	1-249-417-11	CARBON	1K 5% 1/4W
R352	1-247-883-00	CARBON	150K 5% 1/4W	R443	1-249-417-11	CARBON	1K 5% 1/4W
R353	1-249-416-11	CARBON	820 5% 1/4W	R444	1-249-429-11	CARBON	10K 5% 1/4W
R354	1-249-415-11	CARBON	680 5% 1/4W	R445	1-249-427-11	CARBON	6.8K 5% 1/4W
R355	1-249-437-11	CARBON	47K 5% 1/4W	R446	1-249-417-11	CARBON	1K 5% 1/4W
R356	1-249-441-11	CARBON	100K 5% 1/4W	R453	1-249-413-11	CARBON	470 5% 1/4W
R357	1-247-881-00	CARBON	120K 5% 1/4W	R456	1-249-417-11	CARBON	1K 5% 1/4W
R358	1-249-430-11	CARBON	12K 5% 1/4W	R460	1-249-413-11	CARBON	470 5% 1/4W
R360	1-249-425-11	CARBON	4.7K 5% 1/4W	R461	1-249-413-11	CARBON	470 5% 1/4W
R361	1-249-423-11	CARBON	3.3K 5% 1/4W	R462	1-249-413-11	CARBON	470 5% 1/4W
R362	1-249-433-11	CARBON	22K 5% 1/4W	R463	1-249-413-11	CARBON	470 5% 1/4W
R363	1-249-433-11	CARBON	22K 5% 1/4W	R466	1-249-417-11	CARBON	1K 5% 1/4W
R364	1-249-418-11	CARBON	1.2K 5% 1/4W	R467	1-249-425-11	CARBON	4.7K 5% 1/4W
R365	1-249-425-11	CARBON	4.7K 5% 1/4W	R468	1-249-415-11	CARBON	680 5% 1/4W
R366	1-249-417-11	CARBON	1K 5% 1/4W	R470	1-249-425-11	CARBON	4.7K 5% 1/4W
R367	1-249-421-11	CARBON	2.2K 5% 1/4W	R471	1-249-415-11	CARBON	680 5% 1/4W
R368	1-249-429-11	CARBON	10K 5% 1/4W	R473	1-249-425-11	CARBON	4.7K 5% 1/4W
R369	1-249-425-11	CARBON	4.7K 5% 1/4W	R474	1-249-415-11	CARBON	680 5% 1/4W
R370	1-249-413-11	CARBON	470 5% 1/4W	R476	1-249-417-11	CARBON	1K 5% 1/4W
R371	1-249-405-11	CARBON	100 5% 1/4W	R477	1-249-441-11	CARBON	100K 5% 1/4W
R372	1-249-405-11	CARBON	100 5% 1/4W	R478	1-249-429-11	CARBON	10K 5% 1/4W
R373	1-249-417-11	CARBON	1K 5% 1/4W	R479	1-249-429-11	CARBON	10K 5% 1/4W
R374	1-249-431-11	CARBON	15K 5% 1/4W	R480	1-249-429-11	CARBON	10K 5% 1/4W
R375	1-249-435-11	CARBON	33K 5% 1/4W	R481	1-249-407-11	CARBON	150 5% 1/4W
R376	1-249-419-11	CARBON	1.5K 5% 1/4W	R482	1-249-417-11	CARBON	1K 5% 1/4W
R377	1-249-421-11	CARBON	2.2K 5% 1/4W	R483	1-249-417-11	CARBON	1K 5% 1/4W
R378	1-249-422-11	CARBON	2.7K 5% 1/4W	R484	1-249-433-11	CARBON	22K 5% 1/4W
R381	1-249-429-11	CARBON	10K 5% 1/4W	R489	1-247-891-00	CARBON	330K 5% 1/4W
R404	1-249-429-11	CARBON	10K 5% 1/4W	R490	1-247-891-00	CARBON	330K 5% 1/4W
R405	1-249-429-11	CARBON	10K 5% 1/4W	R491	1-249-417-11	CARBON	1K 5% 1/4W
R406	1-249-417-11	CARBON	1K 5% 1/4W	R4001	1-249-436-11	CARBON	39K 5% 1/4W
R407	1-249-429-11	CARBON	10K 5% 1/4W	R4002	1-249-437-11	CARBON	47K 5% 1/4W
R408	1-249-429-11	CARBON	10K 5% 1/4W	R4003	1-249-432-11	CARBON	18K 5% 1/4W
R409	1-249-417-11	CARBON	1K 5% 1/4W	R4004	1-249-436-11	CARBON	39K 5% 1/4W
R410	1-249-429-11	CARBON	10K 5% 1/4W	R4005	1-249-435-11	CARBON	33K 5% 1/4W
R411	1-249-429-11	CARBON	10K 5% 1/4W	R4006	1-249-435-11	CARBON	33K 5% 1/4W
R412	1-249-417-11	CARBON	1K 5% 1/4W	R4007	1-249-421-11	CARBON	2.2K 5% 1/4W
R413	1-249-403-11	CARBON	68 5% 1/4W	R4008	1-249-421-11	CARBON	2.2K 5% 1/4W
R414	1-249-403-11	CARBON	68 5% 1/4W	R4009	1-249-421-11	CARBON	2.2K 5% 1/4W
R415	1-249-403-11	CARBON	68 5% 1/4W	R4010	1-249-436-11	CARBON	39K 5% 1/4W
R416	1-249-419-11	CARBON	1.5K 5% 1/4W	R4011	1-249-417-11	CARBON	1K 5% 1/4W
R417	1-249-411-11	CARBON	330 5% 1/4W	R4012	1-249-417-11	CARBON	1K 5% 1/4W
R418	1-249-419-11	CARBON	1.5K 5% 1/4W	R4014	1-249-441-11	CARBON	100K 5% 1/4W
R419	1-249-411-11	CARBON	330 5% 1/4W	R4015	1-249-441-11	CARBON	100K 5% 1/4W
R420	1-249-419-11	CARBON	1.5K 5% 1/4W	R4016	1-249-439-11	CARBON	68K 5% 1/4W
R421	1-249-411-11	CARBON	330 5% 1/4W	R4017	1-249-425-11	CARBON	4.7K 5% 1/4W
R422	1-249-429-11	CARBON	10K 5% 1/4W	R4018	1-247-895-00	CARBON	470K 5% 1/4W
R423	1-249-429-11	CARBON	10K 5% 1/4W	R4019	1-249-424-11	CARBON	3.9K 5% 1/4W
R424	1-249-421-11	CARBON	2.2K 5% 1/4W	R4020	1-249-429-11	CARBON	10K 5% 1/4W
R425	1-247-804-11	CARBON	75 5% 1/4W	R4021	1-249-429-11	CARBON	10K 5% 1/4W
R426	1-249-409-11	CARBON	220 5% 1/4W	R4022	1-249-405-11	CARBON	100 5% 1/4W
R427	1-249-425-11	CARBON	4.7K 5% 1/4W	R4023	1-249-405-11	CARBON	100 5% 1/4W
R428	1-249-425-11	CARBON	4.7K 5% 1/4W	R4024	1-249-405-11	CARBON	100 5% 1/4W
R429	1-249-429-11	CARBON	10K 5% 1/4W	R4025	1-249-415-11	CARBON	680 5% 1/4W
R430	1-249-413-11	CARBON	470 5% 1/4W	R4026	1-247-891-00	CARBON	330K 5% 1/4W
R431	1-249-413-11	CARBON	470 5% 1/4W	R4027	1-249-429-11	CARBON	10K 5% 1/4W
R432	1-249-425-11	CARBON	4.7K 5% 1/4W				

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R4028	1-249-417-11	CARBON	1K 5% 1/4W	C3034	1-101-361-00	CERAMIC	150PF 5% 50V
R4029	1-249-434-11	CARBON	27K 5% 1/4W	C3039	1-102-951-00	CERAMIC	15PF 5% 50V
R4030	1-249-414-11	CARBON	560 5% 1/4W	C3040	1-101-361-00	CERAMIC	150PF 5% 50V
R4031	1-249-417-11	CARBON	1K 5% 1/4W	C3043	1-102-971-00	CERAMIC	82PF 5% 50V
R4032	1-249-424-11	CARBON	3.9K 5% 1/4W	C3044	1-124-963-11	ELECT	33MF 20% 16V
R4033	1-249-411-11	CARBON	330 5% 1/4W	C3076	1-124-477-11	ELECT	47MF 20% 16V
R4034	1-249-409-11	CARBON	220 5% 1/4W	C3077	1-101-361-00	CERAMIC	150PF 5% 50V
R4035	1-249-417-11	CARBON	1K 5% 1/4W	C3078	1-124-477-11	ELECT	47MF 20% 16V
R4036	1-249-421-11	CARBON	2.2K 5% 1/4W				
R4037	1-249-425-11	CARBON	4.7K 5% 1/4W				
R4038	1-249-441-11	CARBON	100K 5% 1/4W				
R4039	1-249-433-11	CARBON	22K 5% 1/4W				
R4040	1-249-441-11	CARBON	100K 5% 1/4W				
R4041	1-249-425-11	CARBON	4.7K 5% 1/4W				
R4042	1-249-441-11	CARBON	100K 5% 1/4W				
R4043	1-249-429-11	CARBON	10K 5% 1/4W				
R4045	1-249-425-11	CARBON	4.7K 5% 1/4W				
R4046	1-249-419-11	CARBON	1.5K 5% 1/4W				
<CONNECTOR>							
RV341	1-228-996-00	RES, ADJ, CARBON	47K	CNB131*1-565-486-11	CONNECTOR, BOARD TO BOARD 10P		
RV4001	1-228-996-00	RES, ADJ, CARBON	47K	CNB132*1-565-486-11	CONNECTOR, BOARD TO BOARD 10P		

*A-1135-526-A	BI BOARD, COMPLETE						

*4-376-533-01	CASE (MAIN), SHIELD						
*4-376-534-01	CASE (UPPER), SHIELD						
*4-376-535-01	CASE (BOTTOM), SHIELD						
<VARIABLE RESISTOR>							
BP3001	1-235-835-11	FILTER, BAND PASS					
<CAPACITOR>							
C3001	1-102-978-00	CERAMIC	220PF 5% 50V	D3001	8-719-911-19	DIODE	ISS119
C3002	1-102-978-00	CERAMIC	220PF 5% 50V	D3002	8-719-911-19	DIODE	ISS119
C3003	1-101-888-00	CERAMIC	68PF 5% 50V	D3003	8-719-911-19	DIODE	ISS119
C3004	1-102-816-00	CERAMIC	120PF 5% 50V	D3004	8-719-911-19	DIODE	ISS119
C3005	1-102-953-00	CERAMIC	18PF 5% 50V	D3005	8-719-911-19	DIODE	ISS119
C3006	1-102-953-00	CERAMIC	18PF 5% 50V	D3010	8-719-911-19	DIODE	ISS119
C3007	1-102-816-00	CERAMIC	120PF 5% 50V	D3011	8-719-911-19	DIODE	ISS119
C3008	1-101-888-00	CERAMIC	68PF 5% 50V				
C3009	1-101-004-00	CERAMIC	0.01MF 50V				
C3010	1-136-153-00	MYLAR	0.01MF 10% 50V				
C3011	1-136-157-00	MYLAR	0.022MF 10% 50V				
C3012	1-136-165-00	MYLAR	0.1MF 10% 50V				
C3013	1-124-119-00	ELECT	330MF 20% 16V				
C3014	1-124-499-11	ELECT	1MF 20% 50V				
C3015	1-124-499-11	ELECT	1MF 20% 50V				
C3016	1-136-161-00	MYLAR	0.047MF 10% 50V				
C3017	1-136-173-00	FILM	0.47MF 5% 50V				
C3018	1-101-006-00	CERAMIC	0.047MF 50V				
C3019	1-136-157-00	MYLAR	0.022MF 10% 50V				
C3020	1-136-157-00	MYLAR	0.022MF 10% 50V				
C3021	1-102-074-00	CERAMIC	0.001MF 10% 50V				
C3023	1-102-074-00	CERAMIC	0.001MF 10% 50V				
C3024	1-101-004-00	CERAMIC	0.01MF 50V				
C3025	1-101-004-00	CERAMIC	0.01MF 50V				
C3031	1-124-963-11	ELECT	33MF 20% 16V				
C3032	1-124-120-11	ELECT	220MF 20% 16V				
<COIL>							
L3001	1-404-554-11	COIL					
L3002	1-404-554-11	COIL					
L3003	1-404-539-11	COIL					
L3004	1-408-408-00	INDUCTOR					
L3005	1-404-554-11	COIL					
L3006	1-408-429-00	INDUCTOR					
L3007	1-404-495-00	COIL					
L3008	1-410-476-11	INDUCTOR					
L3009	1-404-495-00	COIL					
L3010	1-408-423-00	INDUCTOR					
L3012	1-408-423-00	INDUCTOR					
L3013	1-410-482-31	INDUCTOR					
L3093	1-408-406-00	INDUCTOR					
<TRANSISTOR>							
Q3001	8-729-178-54	TRANSISTOR	2SC2785				
Q3002	8-729-178-54	TRANSISTOR	2SC2785				
Q3003	8-729-900-36	TRANSISTOR	DTC124ES				
Q3004	8-729-178-54	TRANSISTOR	2SC2785				
Q3006	8-729-900-36	TRANSISTOR	DTC124ES				
Q3007	8-729-900-36	TRANSISTOR	DTC124ES				
Q3008	8-729-900-36	TRANSISTOR	DTC124ES				
Q3009	8-729-178-54	TRANSISTOR	2SC2785				

The components identified by shading and mark Δ are critical for safety.
Replace only with part number specified.

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK				
Q3013	8-729-178-54	TRANSISTOR 2SC2785		R3085	1-249-417-11	CARBON 1K	5% 1/4W				
Q3020	8-729-178-54	TRANSISTOR 2SC2785		R3086	1-249-435-11	CARBON 33K	5% 1/4W				
Q3021	8-729-178-54	TRANSISTOR 2SC2785		R3087	1-249-416-11	CARBON 820	5% 1/4W				
Q3025	8-729-178-54	TRANSISTOR 2SC2785		R3088	1-249-414-11	CARBON 560	5% 1/4W				
Q3026	8-729-900-36	TRANSISTOR DTC124ES		R3089	1-249-417-11	CARBON 1K	5% 1/4W				
Q3027	8-729-178-54	TRANSISTOR 2SC2785		R3090	1-249-410-11	CARBON 270	5% 1/4W				
Q3028	8-729-178-54	TRANSISTOR 2SC2785		R3091	1-249-413-11	CARBON 470	5% 1/4W				
Q3031	8-729-178-54	TRANSISTOR 2SC2785		R3092	1-249-412-11	CARBON 390	5% 1/4W				
Q3032	8-729-117-54	TRANSISTOR 2SA1175		R3093	1-249-409-11	CARBON 220	5% 1/4W				
<RESISTOR>											
R3001	1-249-418-11	CARBON 1.2K	5% 1/4W	<VARIABLE RESISTOR>							
R3002	1-249-415-11	CARBON 680	5% 1/4W	RV3001 1-230-504-11 RES, ADJ, CARBON 220							
R3003	1-249-408-11	CARBON 180	5% 1/4W	<TRANSFORMER>							
R3004	1-249-412-11	CARBON 390	5% 1/4W	T3001 1-404-584-11 COIL							
R3005	1-249-418-11	CARBON 1.2K	5% 1/4W	<CRYSTAL>							
R3006	1-249-429-11	CARBON 10K	5% 1/4W	X3001 1-567-131-00 OSCILLATOR, CRYSTAL							
R3007	1-215-438-00	METAL 5.1K	1% 1/6W	X3002 1-567-413-11 VIBRATOR, CRYSTAL							
R3008	1-249-439-11	CARBON 68K	5% 1/4W	*****							
R3009	1-249-430-11	CARBON 12K	5% 1/4W	*1-627-734-11 F1 BOARD							
R3011	1-249-439-11	CARBON 68K	5% 1/4W	*****							
R3012	1-249-414-11	CARBON 560	5% 1/4W	<CONNECTOR>							
R3013	1-249-433-11	CARBON 22K	5% 1/4W	CNF62 *1-566-664-11 PIN, CONNECTOR 4P							
R3015	1-249-437-11	CARBON 47K	5% 1/4W	<SWITCH>							
R3017	1-249-441-11	CARBON 100K	5% 1/4W	S1601 Δ 1-571-433-11 SWITCH, PUSH (AC POWER)							
R3018	1-249-419-11	CARBON 1.5K	5% 1/4W	*****							
R3019	1-249-410-11	CARBON 270	5% 1/4W	*A-1245-436-A F2 BOARD, COMPLETE							
R3020	1-249-416-11	CARBON 820	5% 1/4W	*****							
R3021	1-249-417-11	CARBON 1K	5% 1/4W	<CAPACITOR>							
R3022	1-249-410-11	CARBON 270	5% 1/4W	C1601 Δ 1-136-519-11 FILM 0.47MF							
R3023	1-249-423-11	CARBON 3.3K	5% 1/4W	C1602 Δ 1-136-518-11 FILM 0.33MF							
R3024	1-249-405-11	CARBON 100	5% 1/4W	C1604 Δ 1-161-964-61 CERAMIC 0.0047MF							
R3025	1-249-435-11	CARBON 33K	5% 1/4W	C1605 Δ 1-161-964-61 CERAMIC 0.0047MF							
R3026	1-249-416-11	CARBON 820	5% 1/4W	C1606 1-162-599-12 CERAMIC 0.0047MF							
R3027	1-249-436-11	CARBON 39K	5% 1/4W	C1607 1-125-318-00 ELECT (BLOCK) 220MF							
R3028	1-249-419-11	CARBON 1.5K	5% 1/4W	C1608 Δ 1-162-578-51 CERAMIC 0.0047MF							
R3029	1-249-435-11	CARBON 33K	5% 1/4W	C1609 Δ 1-162-578-51 CERAMIC 0.0047MF							
R3031	1-249-419-11	CARBON 1.5K	5% 1/4W	C1610 Δ 1-162-578-51 CERAMIC 0.0047MF							
R3032	1-249-414-11	CARBON 560	5% 1/4W	C1611 Δ 1-162-578-51 CERAMIC 0.0047MF							
R3033	1-249-435-11	CARBON 33K	5% 1/4W	C1612 1-124-556-11 ELECT 2200MF							
R3034	1-249-436-11	CARBON 39K	5% 1/4W	C1613 1-124-911-11 ELECT 220MF							
R3035	1-249-436-11	CARBON 39K	5% 1/4W	C1614 1-123-875-11 ELECT 10MF							
R3037	1-249-429-11	CARBON 10K	5% 1/4W	C1615 1-124-473-11 ELECT 1000MF							
R3038	1-249-429-11	CARBON 10K	5% 1/4W	C1616 1-124-477-11 ELECT 47MF							
R3039	1-249-419-11	CARBON 1.5K	5% 1/4W	C1617 1-124-499-11 ELECT 1MF							
R3040	1-249-421-11	CARBON 2.2K	5% 1/4W	C1618 1-124-477-11 ELECT 47MF							
R3048	1-249-434-11	CARBON 27K	5% 1/4W	C1621 1-126-101-11 ELECT 100MF							
R3049	1-249-405-11	CARBON 100	5% 1/4W	C1622 1-126-101-11 ELECT 100MF							
R3056	1-247-893-11	CARBON 390K	5% 1/4W	C1623 1-126-176-11 ELECT 220MF							
R3057	1-247-893-11	CARBON 390K	5% 1/4W	C1619 1-124-441-11 ELECT 20%							
R3058	1-249-409-11	CARBON 220	5% 1/4W	C1620 1-124-441-11 ELECT 10%							
R3061	1-249-421-11	CARBON 2.2K	5% 1/4W	C1621 1-124-441-11 ELECT 20%							
R3062	1-249-421-11	CARBON 2.2K	5% 1/4W	C1622 1-124-441-11 ELECT 20%							
R3063	1-249-401-11	CARBON 47	5% 1/4W	C1623 1-124-441-11 ELECT 20%							
R3064	1-249-433-11	CARBON 22K	5% 1/4W	C1624 1-124-441-11 ELECT 20%							
R3065	1-249-433-11	CARBON 22K	5% 1/4W	C1625 1-124-441-11 ELECT 20%							
R3071	1-249-423-11	CARBON 3.3K	5% 1/4W	C1626 1-124-441-11 ELECT 20%							
R3072	1-249-423-11	CARBON 3.3K	5% 1/4W	C1627 1-124-441-11 ELECT 20%							
R3075	1-249-437-11	CARBON 47K	5% 1/4W	C1628 1-124-441-11 ELECT 20%							
R3076	1-249-437-11	CARBON 47K	5% 1/4W	C1629 1-124-441-11 ELECT 20%							
R3077	1-249-441-11	CARBON 100K	5% 1/4W	C1630 1-124-441-11 ELECT 20%							
R3081	1-249-441-11	CARBON 100K	5% 1/4W	C1631 1-124-441-11 ELECT 20%							

The components identified by shading and mark **A** are critical for safety.
Replace only with part number specified.

F2

Q

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK				
<CONNECTOR>											
CNF20	*1-566-664-11	PIN, CONNECTOR 4P		T1601A	1-449-456-11	TRANSFORMER, POWER					
CNF21	*1-566-664-11	PIN, CONNECTOR 4P		THP601A	1-808-059-31	THERMISTOR, POSITIVE					
CNF22	*1-564-891-11	PLUG, CONNECTOR 2P		*****							
CNF63	*1-564-509-11	PLUG, CONNECTOR 6P		*****							
CNF64	*1-508-766-00	PIN, CONNECTOR (5MM PITCH) 4P		*****							
CNF65	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P		*****							
CNF67	*1-564-506-11	PLUG, CONNECTOR 3P		*****							
CNF68	*1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P		*****							
CNF81	*1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P		*****							
<DIODE>											
D1601	8-719-946-90	DIODE KBU4JL-6088		<CAPACITOR>							
D1602	8-719-511-40	DIODE S1VB40		C1301	1-131-381-00	TANTALUM	47MF	10%	10V		
D1603	8-719-911-19	DIODE ISS119		C1302	1-101-004-00	CERAMIC	0.01MF	50V			
D1604	8-719-911-19	DIODE ISS119		C1303	1-126-101-11	ELECT	100MF	20%	16V		
D1605	8-719-109-97	DIODE RD6.8ES-B2		C1304	1-101-004-00	CERAMIC	0.01MF	50V			
D1606	8-719-911-19	DIODE ISS119		C1305	1-131-381-00	TANTALUM	47MF	10%	10V		
<FUSE>											
F1601A	1-532-350-11	FUSE, TIME-LAG 4A/250V		C1306	1-101-004-00	CERAMIC	0.01MF	50V			
	1-533-087-00	HOLDER, FUSE; F1601		C1307	1-131-377-00	TANTALUM	10MF	10%	10V		
<IC>											
IC1601	8-759-700-06	IC NJM7812B		C1308	1-101-004-00	CERAMIC	0.01MF	50V			
IC1603	8-749-930-52	IC SI-3052V		C1309	1-131-377-00	TANTALUM	10MF	10%	10V		
	4-377-115-01	SPACER, MICA; IC1603		C1310	1-101-004-00	CERAMIC	0.01MF	50V			
	*4-391-704-01	HOLDER (A), TR; IC 1603		*****							
<FILTER>											
LF1601A	1-424-183-11	TRANSFORMER, LINE FILTER		C1311	1-126-101-11	ELECT	100MF	20%	16V		
LF1602A	1-424-183-11	TRANSFORMER, LINE FILTER		C1312	1-101-004-00	CERAMIC	0.01MF	50V			
LF1603A	1-421-592-00	TRANSFORMER, FERRITE		C1313	1-131-381-00	TANTALUM	47MF	10%	10V		
<TRANSISTOR>											
Q1601	8-729-109-53	TRANSISTOR 2SD795A-Q		C1314	1-101-004-00	CERAMIC	0.01MF	50V			
Q1602	8-729-178-54	TRANSISTOR 2SC2785		C1315	1-123-875-11	ELECT	10MF	20%	50V		
Q1603	8-729-178-54	TRANSISTOR 2SC2785		*****							
<RESISTOR>											
R1603A	1-205-949-11	WIREWOUND	1.8	5%	10W	C1316	1-123-875-11	ELECT	10MF	20%	50V
R1604A	1-244-945-91	CARBON	1M	5%	1/2W	C1317	1-101-004-00	CERAMIC	0.01MF	50V	
R1606A	1-247-289-11	CARBON	8.2M	5%	1W	C1318	1-101-004-00	CERAMIC	0.01MF	50V	
R1607A	1-249-377-51	CARBON	0.47	5%	1/4W	C1319	1-101-004-00	CERAMIC	0.01MF	50V	
R1608A	1-249-377-51	CARBON	0.47	5%	1/4W	C1320	1-123-875-11	ELECT	10MF	20%	50V
<RELAY>											
RY1601A	1-515-579-11	RELAY		C1321	1-123-875-11	ELECT	10MF	20%	50V		
R1615	1-249-421-11	CARBON	2.2K	5%	1/4W	C1322	1-101-004-00	CERAMIC	0.01MF	50V	
R1623A	1-205-949-11	WIREWOUND	1.8	5%	10W	C1323	1-101-004-00	CERAMIC	0.01MF	50V	
<OTHER>											
<TRANSFORMER>											
				C1324	1-101-004-00	CERAMIC	0.01MF	50V			
				C1325	1-123-875-11	ELECT	10MF	20%	50V		

				C1326	1-123-875-11	ELECT	10MF	20%	50V		
				C1327	1-101-004-00	CERAMIC	0.01MF	50V			
				C1328	1-101-004-00	CERAMIC	0.01MF	50V			
				C1329	1-101-004-00	CERAMIC	0.01MF	50V			
				C1330	1-131-377-00	TANTALUM	10MF	10%	10V		

				C1331	1-101-004-00	CERAMIC	0.01MF	50V			
				C1332	1-131-377-00	TANTALUM	10MF	10%	10V		
				C1333	1-101-004-00	CERAMIC	0.01MF	50V			
				C1334	1-101-004-00	CERAMIC	0.01MF	50V			
				C1335	1-101-004-00	CERAMIC	0.01MF	50V			
				C1336	1-101-004-00	CERAMIC	0.01MF	50V			

				C1337	1-101-004-00	CERAMIC	0.01MF	50V			
				C1338	1-131-377-00	TANTALUM	10MF	10%	10V		
				C1339	1-101-004-00	CERAMIC	0.01MF	50V			
				C1340	1-123-875-11	ELECT	10MF	20%	50V		
				C1341	1-101-004-00	CERAMIC	0.01MF	50V			

				C1342	1-101-004-00	CERAMIC	0.01MF	50V			
				C1343	1-101-004-00	CERAMIC	0.01MF	50V			

				C1344	1-101-004-00	CERAMIC	0.01MF	50V			
				C1345	1-101-004-00	CERAMIC	0.01MF	50V			
				C1346	1-101-004-00	CERAMIC	0.01MF	50V			
				C1347	1-101-004-00	CERAMIC	0.01MF	50V			
				C1348	1-101-004-00	CERAMIC	0.01MF	50V			
				C1349	1-101-004-00	CERAMIC	0.01MF	50V			
				C1350	1-101-004-00	CERAMIC	0.01MF	50V			

				C1351	1-101-004-00	CERAMIC	0.01MF	50V			
				C1352	1-101-004-00	CERAMIC	0.01MF	50V			
				C1353	1-101-004-00	CERAMIC	0.01MF	50V			
				C1354	1-101-004-00	CERAMIC	0.01MF	50V			
				C1355	1-101-004-00	CERAMIC	0.01MF	50V			
				C1356	1-101-004-00	CERAMIC	0.01MF	50V			
				C1357	1-101-004-00	CERAMIC	0.01MF	50V			

				C1358	1-101-004-00	CERAMIC	0.01MF	50V			
				C1359	1-101-004-00	CERAMIC	0.01MF	50V			
				C1360	1-101-004-00	CERAMIC	0.01MF	50V			

Q

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK	
C1361	1-136-160-00	MYLAR	0.039MF	10%	50V	IC1310	8-752-328-75	IC CXD2001Q
C1362	1-124-902-00	ELECT	0.47MF	20%	50V	IC1311	8-759-970-72	IC CXK1206M
C1363	1-124-902-00	ELECT	0.47MF	20%	50V	IC1312	8-759-970-72	IC CXK1206M
C1364	1-102-074-00	CERAMIC	0.001MF	10%	50V	IC1314	8-752-328-71	IC CXD2000Q
C1365	1-102-947-00	CERAMIC	10PF	0.5PF	50V	IC1315	8-759-914-44	IC TL431CLPB
C1366	1-102-973-00	CERAMIC	100PF	5%	50V	IC1316	8-759-947-14	IC 74AC04PC
C1367	1-102-973-00	CERAMIC	100PF	5%	50V	IC1317	8-752-032-93	IC CXA1260Q-Z
C1368	1-102-973-00	CERAMIC	100PF	5%	50V	IC1321	8-759-205-06	IC MC74HC74F
C1369	1-102-973-00	CERAMIC	100PF	5%	50V	IC1322	8-759-011-65	IC MC74HC4053F
C1370	1-101-004-00	CERAMIC	0.01MF					
C1371	1-131-377-00	TANTALUM	10MF	10%	10V			<COIL>
C1372	1-101-004-00	CERAMIC	0.01MF		50V	L1304	1-410-470-11	INDUCTOR 10UH
C1373	1-101-004-00	CERAMIC	0.01MF		50V	L1305	1-408-397-00	INDUCTOR 1UH
C1374	1-124-963-11	ELECT	33MF	20%	16V	L1306	1-408-397-00	INDUCTOR 1UH
C1375	1-124-963-11	ELECT	33MF	20%	16V	L1307	1-410-470-11	INDUCTOR 10UH
C1376	1-124-963-11	ELECT	33MF	20%	16V	L1308	1-408-397-00	INDUCTOR 1UH
C1385	1-123-875-11	ELECT	10MF	20%	50V	L1312	1-404-608-11	COIL
C1389	1-130-480-00	MYLAR	0.0056MF	10%	50V			
C1390	1-124-499-11	ELECT	1MF	20%	50V			
<CONNECTOR>								
CNQ43	*1-565-494-11	CONNECTOR, BOARD TO BOARD	18P	Q1301	8-729-178-54	TRANSISTOR 2SC2785		
CNQ44	*1-565-494-11	CONNECTOR, BOARD TO BOARD	18P	Q1302	8-729-178-54	TRANSISTOR 2SC2785		
<DIODE>								
D1301	8-713-300-00	DIODE 1T33		Q1303	8-729-178-54	TRANSISTOR 2SC2785		
<FILTER>								
FL1301	1-236-164-11	ENCAPSULATED COMPONENT		Q1305	8-729-117-54	TRANSISTOR 2SA1175		
FL1302	1-236-129-11	ENCAPSULATED COMPONENT		Q1306	8-729-178-54	TRANSISTOR 2SC2785		
FL1303	1-236-164-11	ENCAPSULATED COMPONENT		Q1307	8-729-117-54	TRANSISTOR 2SA1175		
FL1304	1-236-164-11	ENCAPSULATED COMPONENT		Q1308	8-729-178-54	TRANSISTOR 2SC2785		
FL1305	1-236-071-11	ENCAPSULATED COMPONENT		Q1315	8-729-178-54	TRANSISTOR 2SC2785		
FL1306	1-236-071-11	ENCAPSULATED COMPONENT						
FL1307	1-236-129-11	ENCAPSULATED COMPONENT						
FL1308	1-236-129-11	ENCAPSULATED COMPONENT						
FL1309	1-236-164-11	ENCAPSULATED COMPONENT						
FL1310	1-236-129-11	ENCAPSULATED COMPONENT						
FL1311	1-236-164-11	ENCAPSULATED COMPONENT						
FL1312	1-236-164-11	ENCAPSULATED COMPONENT						
FL1313	1-236-164-11	ENCAPSULATED COMPONENT						
FL1314	1-236-164-11	ENCAPSULATED COMPONENT						
FL1315	1-236-129-11	ENCAPSULATED COMPONENT						
FL1320	1-236-304-11	FILTER, LOW PASS						
FL1321	1-236-304-11	FILTER, LOW PASS						
FL1322	1-236-304-11	FILTER, LOW PASS						
FL1323	1-236-303-11	FILTER, LOW PASS						
FL1324	1-236-303-11	FILTER, LOW PASS						
FL1325	1-236-303-11	FILTER, LOW PASS						
<IC>								
IC1301	8-752-032-55	IC CXA1096M		R1321	1-249-417-11	CARBON 1K 5% 1/4W		
IC1302	8-752-032-55	IC CXA1096M		R1322	1-249-417-11	CARBON 1K 5% 1/4W		
IC1303	8-752-032-55	IC CXA1096M		R1323	1-249-417-11	CARBON 1K 5% 1/4W		
IC1304	8-752-328-75	IC CXD2001Q		R1324	1-249-417-11	CARBON 1K 5% 1/4W		
IC1305	8-759-970-72	IC CXK1206M		R1325	1-249-409-11	CARBON 220 5% 1/4W		
IC1306	8-759-970-72	IC CXK1206M		R1326	1-249-409-11	CARBON 220 5% 1/4W		
IC1307	8-752-328-75	IC CXD2001Q		R1327	1-249-409-11	CARBON 220 5% 1/4W		
IC1308	8-759-970-72	IC CXK1206M		R1328	1-249-408-11	CARBON 180 5% 1/4W		
IC1309	8-759-970-72	IC CXK1206M		R1329	1-249-397-11	CARBON 22 5% 1/4W		
				R1330	1-249-417-11	CARBON 1K 5% 1/4W		
				R1331	1-247-735-11	CARBON 47 5% 1/2W		

Q A

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R1332	1-249-397-11	CARBON	22 5% 1/4W	C142	1-101-361-00	CERAMIC	150PF 5% 50V
R1333	1-249-413-11	CARBON	470 5% 1/4W	C143	1-102-973-00	CERAMIC	100PF 5% 50V
R1334	1-249-423-11	CARBON	3.3K 5% 1/4W	C144	1-102-965-00	CERAMIC	39PF 5% 50V
R1335	1-249-421-11	CARBON	2.2K 5% 1/4W	C151	1-124-477-11	ELECT	47MF 20% 16V
R1336	1-249-409-11	CARBON	220 5% 1/4W	C152	1-136-161-00	FILM	0.047MF 5% 50V
R1337	1-249-409-11	CARBON	220 5% 1/4W	C153	1-101-004-00	CERAMIC	0.01MF 50V
R1360	1-249-429-11	CARBON	10K 5% 1/4W	C154	1-101-004-00	CERAMIC	0.01MF 50V
R1361	1-249-429-11	CARBON	10K 5% 1/4W	C155	1-124-477-11	ELECT	47MF 20% 16V
R1368	1-249-417-11	CARBON	1K 5% 1/4W				
R1369	1-249-414-11	CARBON	560 5% 1/4W				
R1370	1-249-409-11	CARBON	220 5% 1/4W				
R1371	1-247-887-00	CARBON	220K 5% 1/4W	CD101	1-404-684-11	DISCRIMINATOR, CERAMIC	
R1372	1-249-441-11	CARBON	100K 5% 1/4W	CF101	1-567-569-11	FILTER, CERAMIC	
R1373	1-249-417-11	CARBON	1K 5% 1/4W				
R1374	1-249-417-11	CARBON	1K 5% 1/4W				
R1375	1-247-887-00	CARBON	220K 5% 1/4W				
R1376	1-247-887-00	CARBON	220K 5% 1/4W				
R1377	1-247-887-00	CARBON	220K 5% 1/4W	CNA11 *1-566-659-11	CONNECTOR, HINGE (SOCKET) 18P		
				CNA18 *1-565-503-11	CONNECTOR, BOARD TO BOARD 12P		

<DIODE>							
*A-1296-497-A A BOARD, COMPLETE							

1-464-964-11 IF BLOCK (IFG-5.5S)							
*1-565-488-11 CONNECTOR, BOARD TO BOARD 12P							
**4-369-734-01 HEAT SINK							
<IC>							
<CAPACITOR>							
C101	1-126-233-11	ELECT	22MF 20% 50V	IC101	8-759-240-52	IC TC4052BP	
C102	1-126-103-11	ELECT	470MF 20% 16V	IC102	8-759-946-32	IC TEA2014A	
C103	1-130-475-00	MYLAR	0.0022MF 5% 50V	IC103	8-759-978-65	IC SAB3036	
C104	1-124-477-11	ELECT	47MF 20% 16V	IC105	8-759-003-90	IC TBA129	
C105	1-101-003-00	CERAMIC	0.0047MF				
<COIL>							
C106	1-126-233-11	ELECT	22MF 20% 50V	L100	1-410-116-11	INDUCTOR	560UH
C107	1-136-177-00	FILM	1MF 5% 50V	L101	1-408-225-00	INDUCTOR	3.3UH
C108	1-101-004-00	CERAMIC	0.01MF	L102	1-410-470-11	INDUCTOR	10UH
C109	1-101-003-00	CERAMIC	0.0047MF	L103	1-408-408-00	INDUCTOR	8.2UH
C110	1-101-003-00	CERAMIC	0.0047MF	L104	1-410-476-11	INDUCTOR	33UH
C111	1-124-477-11	ELECT	47MF 20% 16V	L106	1-410-471-11	INDUCTOR	12UH
C112	1-101-003-00	CERAMIC	0.0047MF 50V	L108	1-410-471-11	INDUCTOR	12UH
C113	1-101-004-00	CERAMIC	0.01MF 50V				
C115	1-123-875-11	ELECT	10MF 20% 50V				
C116	1-123-875-11	ELECT	10MF 20% 50V				
<TRANSISTOR>							
C117	1-123-875-11	ELECT	10MF 20% 50V	Q106	8-729-900-65	TRANSISTOR DTA144ES	
C118	1-123-875-11	ELECT	10MF 20% 50V	Q107	8-729-900-89	TRANSISTOR DTC144ES	
C119	1-136-161-00	FILM	0.047MF 5% 50V	Q109	8-729-901-59	TRANSISTOR BF199	
C120	1-102-965-00	CERAMIC	39PF 5% 50V	Q110	8-729-178-54	TRANSISTOR 2SC2785	
C121	1-124-477-11	ELECT	47MF 20% 16V	Q111	8-729-178-54	TRANSISTOR 2SC2785	
C122	1-124-477-11	ELECT	47MF 20% 16V	Q112	8-729-178-54	TRANSISTOR 2SC2785	
C123	1-101-004-00	CERAMIC	0.01MF 50V	Q113	8-729-178-54	TRANSISTOR 2SC2785	
C124	1-124-477-11	ELECT	47MF 20% 16V	Q114	8-729-178-54	TRANSISTOR 2SC2785	
C127	1-124-477-11	ELECT	47MF 20% 16V	Q115	8-729-178-54	TRANSISTOR 2SC2785	
C128	1-124-477-11	ELECT	47MF 20% 16V	Q116	8-729-178-54	TRANSISTOR 2SC2785	
C129	1-124-477-11	ELECT	47MF 20% 16V	Q118	8-729-117-54	TRANSISTOR 2SA1175	
C130	1-126-101-11	ELECT	100MF 20% 16V				
C132	1-101-888-00	CERAMIC	68PF 5% 50V				
C133	1-102-973-00	CERAMIC	100PF 5% 50V				
C134	1-102-963-00	CERAMIC	33PF 5% 50V				
<RESISTOR>							
C135	1-124-477-11	ELECT	47MF 20% 16V	R102	1-249-429-11	CARBON	10K 5% 1/4W
C136	1-124-477-11	ELECT	47MF 20% 16V	R103	1-249-429-11	CARBON	10K 5% 1/4W
C137	1-124-477-11	ELECT	47MF 20% 16V	R104	1-249-437-11	CARBON	47K 5% 1/4W
C138	1-136-165-00	FILM	0.1MF 5% 50V	R105	1-249-425-11	CARBON	4.7K 5% 1/4W
C141	1-102-822-00	CERAMIC	390PF 5% 50V	R106	1-249-425-11	CARBON	4.7K 5% 1/4W
				R107	1-249-432-11	CARBON	18K 5% 1/4W

A **C**

The components identified by shading and mark ▲ are critical for safety.
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R109	1-249-441-11	CARBON	100K 5% 1/4W				
R110	1-249-429-11	CARBON	10K 5% 1/4W				
R111	1-249-423-11	CARBON	3.3K 5% 1/4W				
R112	1-249-425-11	CARBON	4.7K 5% 1/4W				
R113	1-249-425-11	CARBON	4.7K 5% 1/4W				
R114	1-249-413-11	CARBON	470 5% 1/4W				
R115	1-249-405-11	CARBON	100 5% 1/4W				
R118	1-249-429-11	CARBON	10K 5% 1/4W				
R121	1-249-429-11	CARBON	10K 5% 1/4W				
R122	1-249-428-11	CARBON	8.2K 5% 1/4W				
R123	1-249-431-11	CARBON	15K 5% 1/4W				
R124	1-249-431-11	CARBON	15K 5% 1/4W				
R125	1-249-431-11	CARBON	15K 5% 1/4W				
R126	1-249-431-11	CARBON	15K 5% 1/4W				
R127	1-249-431-11	CARBON	15K 5% 1/4W				
R128	1-249-413-11	CARBON	470 5% 1/4W				
R129	1-249-421-11	CARBON	2.2K 5% 1/4W				
R130	1-249-421-11	CARBON	2.2K 5% 1/4W				
R131	1-249-422-11	CARBON	2.7K 5% 1/4W				
R133	1-249-422-11	CARBON	2.7K 5% 1/4W				
R134	1-249-422-11	CARBON	2.7K 5% 1/4W				
R136	1-249-413-11	CARBON	470 5% 1/4W				
R137	1-249-405-11	CARBON	100 5% 1/4W				
R138	1-249-413-11	CARBON	470 5% 1/4W				
R139	1-249-413-11	CARBON	470 5% 1/4W				
R140	1-249-418-11	CARBON	1.2K 5% 1/4W				
R141	1-249-413-11	CARBON	470 5% 1/4W				
R142	1-249-413-11	CARBON	470 5% 1/4W				
R143	1-249-416-11	CARBON	820 5% 1/4W				
R144	1-249-417-11	CARBON	1K 5% 1/4W				
R145	1-249-413-11	CARBON	470 5% 1/4W				
R146	1-249-421-11	CARBON	2.2K 5% 1/4W				
R147	1-249-429-11	CARBON	10K 5% 1/4W				
R152	1-249-417-11	CARBON	1K 5% 1/4W				
R153	1-249-417-11	CARBON	1K 5% 1/4W				
R154	1-249-414-11	CARBON	560 5% 1/4W				
R155	1-249-417-11	CARBON	1K 5% 1/4W				
R157	1-249-417-11	CARBON	1K 5% 1/4W				
R158	1-249-409-11	CARBON	220 5% 1/4W				
R159	1-249-409-11	CARBON	220 5% 1/4W				
R160	1-249-396-11	CARBON	18 5% 1/4W				
R166	1-249-431-11	CARBON	15K 5% 1/4W				
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SIF101	1-464-963-11	IF BLOCK (IFG-334F)		Q701	8-729-178-54	TRANSISTOR 2SC2785	
VIF101	1-464-962-11	IF BLOCK (IFG-389FS)		Q702	8-729-178-54	TRANSISTOR 2SC2785	
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T101	1-404-806-11	COIL		Q703	8-729-178-54	TRANSISTOR 2SC2785	
T102	1-404-493-00	COIL		Q704	8-729-326-11	TRANSISTOR 2SC2611	
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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK				
R711	1-249-409-11	CARBON	220 5% 1/4W	L751	1-410-468-11	INDUCTOR	6.8UH				
R712	1-249-409-11	CARBON	220 5% 1/4W	L752	1-410-482-31	INDUCTOR	100UH				
R713	1-249-418-11	CARBON	1.2K 5% 1/4W								
R714	1-249-418-11	CARBON	1.2K 5% 1/4W								
R715	1-249-418-11	CARBON	1.2K 5% 1/4W								
R716	1-249-418-11	CARBON	1.2K 5% 1/4W								
R717	1-249-418-11	CARBON	1.2K 5% 1/4W	Q751	8-729-178-54	TRANSISTOR 2SC2785					
R718	1-249-426-11	CARBON	5.6K 5% 1/4W	Q752	8-729-378-84	TRANSISTOR 2SD788					
R719	1-249-426-11	CARBON	5.6K 5% 1/4W	Q753	8-729-188-24	TRANSISTOR 2SD882					
R721	1-215-923-00	METAL OXIDE	10K 5% 3W F	Q754	8-729-177-24	TRANSISTOR 2SB772					
R722	1-215-923-00	METAL OXIDE	10K 5% 3W F	Q755	8-729-188-24	TRANSISTOR 2SD882					
R723	1-215-923-00	METAL OXIDE	10K 5% 3W F	Q756	8-729-201-78	TRANSISTOR 2SD1406-GR					
R724	1-215-923-00	METAL OXIDE	10K 5% 3W F	Q757	8-729-178-54	TRANSISTOR 2SC2785					
R725	1-215-923-00	METAL OXIDE	10K 5% 3W F								
R726	1-215-923-00	METAL OXIDE	10K 5% 3W F								
R727	1-202-818-00	SOLID	1K 10% 1/2W								
R728	1-202-818-00	SOLID	1K 10% 1/2W	R751	1-249-409-11	CARBON	220 5% 1/4W				
R729	1-202-818-00	SOLID	1K 10% 1/2W	R752	1-249-409-11	CARBON	220 5% 1/4W				
R733	1-202-838-00	SOLID	100K 10% 1/2W	R753	1-249-415-11	CARBON	680 5% 1/4W				
R734	1-216-348-00	METAL OXIDE	0.82 5% 1W F	R754	1-249-411-11	CARBON	330 5% 1/4W				
R736	1-202-842-11	SOLID	220K 10% 1/2W	R755	1-216-431-11	METAL OXIDE	560 5% 1W F				
R737	1-202-842-11	SOLID	220K 10% 1/2W	R756	1-249-414-11	CARBON	560 5% 1/4W				
R738	1-249-405-11	CARBON	100 5% 1/4W	R757	1-249-426-11	CARBON	5.6K 5% 1/4W				
R739	1-202-838-00	SOLID	100K 10% 1/2W	R758	1-249-435-11	CARBON	33K 5% 1/4W				
R740	1-202-848-00	SOLID	680K 10% 1/2W	R759	1-249-393-11	CARBON	10 5% 1/4W F				
R741	1-202-842-11	SOLID	220K 10% 1/2W	R760	1-216-449-11	METAL OXIDE	56 5% 2W F				
<VARIABLE RESISTOR>											
RV701	1-228-989-00	RES. ADJ. CARBON	470	R764	1-249-409-11	CARBON	220 5% 1/4W				
RV702	1-228-989-00	RES. ADJ. CARBON	470	R765	1-249-381-11	CARBON	1 5% 1/4W F				
RV703	1-228-993-00	RES. ADJ. CARBON	4.7K	R766	1-249-426-11	CARBON	5.6K 5% 1/4W				
RV704	1-228-721-00	RES. ADJ. CERAMIC	CARBON 2.2K	R767	1-249-417-11	CARBON	1K 5% 1/4W				
RV705	1-228-721-00	RES. ADJ. CERAMIC	CARBON 2.2K	R768	1-249-426-11	CARBON	5.6K 5% 1/4W				
RV706	1-228-721-00	RES. ADJ. CERAMIC	CARBON 2.2K	R769	1-249-409-11	CARBON	220 5% 1/4W				
RV707	1-230-619-11	RES. ADJ. METAL GLAZE	110M	R771	1-249-423-11	CARBON	3.3K 5% 1/4W F				
RV708	1-230-641-21	RES. ADJ. METAL GLAZE	2.2M	R772	1-249-391-11	CARBON	6.8 5% 1/4W F				

*A-1342-071-A VM BOARD, COMPLETE				*A-1345-798-A D BOARD, COMPLETE							

<CAPACITOR>											
C751	1-102-973-00	CERAMIC	100PF 5% 50V								
C752	1-130-021-00	MYLAR	0.0018MF 10% 50V	C501	1-124-122-11	ELECT	100MF 20% 50V				
C754	1-126-101-11	ELECT	100MF 20% 16V	C503	1-102-123-00	CERAMIC	0.0033MF 10% 50V				
C756	1-136-153-00	MYLAR	0.01MF 10% 50V	C504	1-124-120-11	ELECT	220MF 20% 25V				
C758	1-136-153-00	MYLAR	0.01MF 10% 50V	C505	1-124-902-00	ELECT	0.47MF 20% 50V				
C760	1-124-925-11	ELECT	2.2MF 20% 50V	C506	1-102-112-00	CERAMIC	330PF 10% 50V				
C761	1-106-220-00	MYLAR	0.1MF 10% 100V	C507	1-136-169-00	FILM	0.22MF 5% 50V				
C763	1-124-122-11	ELECT	100MF 20% 50V	C508	1-130-491-00	MYLAR	0.047MF 5% 50V				
C764	1-126-176-11	ELECT	220MF 20% 6.3V	C509	1-126-101-11	ELECT	100MF 20% 16V				
C765	1-101-006-00	CERAMIC	0.047MF	C510	1-106-367-00	MYLAR	0.01MF 10% 100V				
C766	1-124-122-11	ELECT	100MF 20% 50V	C512	1-130-475-00	MYLAR	0.0022MF 10% 50V				
C767	1-102-125-00	CERAMIC	0.0047MF 10% 50V								
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CNM83	*1-564-506-11	PLUG, CONNECTOR	3P	C513	1-124-499-11	ELECT	1MF 20% 50V				
CNM85	*1-564-507-11	PLUG, CONNECTOR	4P	C515	1-102-116-00	CERAMIC	680PF 10% 50V				
				C516	1-124-499-11	ELECT	1MF 20% 50V				
				C517	1-124-902-00	ELECT	0.47MF 20% 50V				
				C518	1-136-175-00	FILM	0.68MF 5% 50V				
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				C519	1-124-637-11	ELECT	1000MF 20% 50V				

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The components identified by shading and mark **A** are critical for safety.
Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK				
C520	1-124-912-11	ELECT	330MF	20%	50V	C836	1-102-030-00	CERAMIC	330PF	10%	500V
C521	1-106-391-12	MYLAR	0.1MF	10%	200V	C837	1-124-480-11	ELECT	470MF	20%	25V
C522	1-108-428-12	MYLAR	0.039MF	10%	200V	C838	1-106-367-00	MYLAR	0.01MF	10%	200V
C523	1-106-387-00	MYLAR	0.068MF	10%	200V	C839	1-124-929-11	ELECT	22MF	20%	100V
C524	1-124-342-00	ELECT	3.3MF	20%	160V	C840	1-162-114-00	CERAMIC	0.0047MF	2Kv	
C525	1-102-820-00	CERAMIC	330PF	5%	50V	C841	1-106-383-00	MYLAR	0.047MF	10%	200V
C526	1-123-875-11	ELECT	10MF	20%	50V	C842	1-136-153-00	MYLAR	0.01MF	10%	50V
C527	1-102-978-00	CERAMIC	220PF	5%	50V	C843	1-130-479-00	MYLAR	0.0047MF	10%	50V
C528	1-124-477-11	ELECT	47MF	20%	16V	C844	1-124-910-11	ELECT	47MF	20%	50V
C530	1-124-122-11	ELECT	100MF	20%	50V	C845	1-126-233-11	ELECT	22MF	20%	50V
C531	1-106-387-00	MYLAR	0.068MF	10%	200V	C847	1-162-318-11	CERAMIC	0.001MF	10%	500V
C539	1-102-233-00	CERAMIC	33PF	10%	500V	C848	1-102-244-00	CERAMIC	220PF	10%	500V
C540	1-130-479-00	MYLAR	0.0047MF	10%	50V	C861	1-124-499-11	ELECT	1MF	20%	50V
C541	1-124-902-00	MYLAR	0.47MF	20%	50V	C862	1-136-154-00	MYLAR	0.012MF	10%	50V
C542	1-106-220-00	MYLAR	0.1MF	10%	100V	C863	1-106-351-00	MYLAR	0.0022MF	10%	100V
C543	1-106-375-12	MYLAR	0.022MF	10%	100V	C864	1-106-343-00	MYLAR	0.001MF	10%	100V
C544	1-102-244-00	CERAMIC	220PF	10%	500V	C865	1-124-910-11	ELECT	47MF	20%	50V
C545	1-124-925-11	ELECT	2.2MF	20%	50V	C866	1-106-379-12	MYLAR	0.033MF	10%	200V
C546	1-123-875-11	ELECT	10MF	20%	50V	C867	1-124-902-00	ELECT	0.47MF	20%	50V
C547	1-130-728-00	FILM	0.0022MF	5%	50V	C868	1-106-383-00	MYLAR	0.047MF	10%	100V
C548	1-102-820-00	CERAMIC	330PF	5%	50V	C869	1-106-375-12	MYLAR	0.022MF	10%	200V
C549	1-124-122-11	ELECT	100MF	20%	50V						
C550	1-124-925-11	ELECT	2.2MF	20%	50V						
C551	1-124-122-11	ELECT	100MF	20%	50V						
C552	1-124-464-11	ELECT	0.22MF	20%	50V						
C553	1-126-101-11	ELECT	100MF	20%	16V	CN801	*1-508-767-00	PIN, CONNECTOR (5MM PITCH) 5P			
C554	1-124-927-11	ELECT	4.7MF	20%	50V	CND81	*1-564-513-11	PLUG, CONNECTOR 10P			
C555	1-136-155-00	MYLAR	0.015MF	10%	50V	CND82	*1-508-767-00	PIN, CONNECTOR (5MM PITCH) 5P			
C556	1-124-499-11	ELECT	1MF	20%	50V	CND83	*1-508-768-00	PIN, CONNECTOR (5MM PITCH) 6P			
C557	1-126-101-11	ELECT	100MF	20%	16V	CND84	*1-565-952-11	PIN, CONNECTOR 10P			
C558	1-124-499-11	ELECT	1MF	20%	50V	CND85	*1-564-507-11	PLUG, CONNECTOR 4P			
C560	1-130-477-00	MYLAR	0.0033MF	10%	50V	CND86	*1-508-786-00	PIN, CONNECTOR (5MM PITCH) 2P			
C561	1-102-112-00	CERAMIC	330PF	10%	50V	CND87	*1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P			
C801	1-123-875-11	ELECT	10MF	20%	50V	CND88	*1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P			
C802	1-124-902-00	ELECT	0.47MF	20%	50V	CND89	*1-564-508-11	PLUG, CONNECTOR 5P			
C803	1-124-925-11	ELECT	2.2MF	20%	50V						
C804	1-124-910-11	ELECT	47MF	20%	50V						
C805	1-106-343-00	MYLAR	0.001MF	10%	200V						
C806	1-124-122-11	ELECT	100MF	20%	50V	D502	8-719-109-75	DIODE RD4.3ES-B2			
C807	1-136-165-00	MYLAR	0.1MF	10%	50V	D503	8-719-911-19	DIODE ISS119			
C808	1-124-499-11	ELECT	1MF	20%	50V	D505	8-719-936-83	DIODE GP08DPKG23			
C809	1-130-471-00	MYLAR	0.001MF	10%	50V	D506	8-719-936-83	DIODE GP08DPKG23			
C810	1-126-101-11	ELECT	100MF	20%	16V	D507	8-719-936-83	DIODE GP08DPKG23			
C814	1-162-134-11	CERAMIC	470PF	10%	2KV	D508	8-719-936-83	DIODE GP08DPKG23			
C815	1-124-927-11	ELECT	4.7MF	20%	50V	D509	8-719-936-83	DIODE GP08DPKG23			
C816	1-124-494-00	ELECT	33MF		160V	D510	8-719-936-83	DIODE GP08DPKG23			
C817	1-125-319-00	ELECT(BLOCK)	330MF	20%	160V	D511	8-719-911-19	DIODE ISS119			
C818	1-102-244-00	CERAMIC	220PF	10%	500V	D513	8-719-911-19	DIODE ISS119			
C819	1-102-212-00	CERAMIC	820PF	10%	500V	D514	8-719-911-19	DIODE ISS119			
C820	1-106-383-00	MYLAR	0.047MF	10%	200V	D515	8-719-936-83	DIODE GP08DPKG23			
C822	A 1-162-116-51	CERAMIC	680PF	10%	2KV	D516	8-719-911-19	DIODE ISS119			
C823	A 1-162-116-51	CERAMIC	680PF	10%	2KV	D801	8-719-911-19	DIODE ISS119			
C824	1-108-410-12	MYLAR	0.0012MF		200V	D802	8-719-911-19	DIODE ISS119			
C825	1-102-030-00	CERAMIC	330PF	10%	500V	D803	8-719-911-19	DIODE ISS119			
C826	1-129-723-00	FILM	0.056MF	5%	630V	D805	8-719-911-19	DIODE ISS119			
C827	1-130-660-11	FILM	20000MF	3%	1.6KV	D806	8-719-911-19	DIODE ISS119			
C828	1-136-126-00	FILM	0.82MF	5%	400V	D807	8-719-924-06	DIODE ERC24-06S			
C829	1-106-351-00	MYLAR	0.0022MF		200V	D808	8-719-971-09	DIODE ERD08-15			
C830	1-136-598-11	FILM	3MF	5%	200V						
C831	1-130-797-11	FILM	0.68MF	10%	250V	4-377-115-01	SPACER, MICA; D808				
C832	1-106-395-00	MYLAR	0.15MF	10%	200V	*4-391-704-01	HOLDER (A), TR; D808				
C833	1-162-131-11	CERAMIC	220PF	10%	2KV	D809	8-719-971-08	DIODE ESAC39M-06C			
C834	1-124-637-11	ELECT	1000MF	20%	50V	D810	8-719-936-83	DIODE GP08DPKG23			
C835	1-102-030-00	CERAMIC	330PF	10%	500V	D811	8-719-936-83	DIODE GP08DPKG23			
						D812	8-719-924-06	DIODE ERC24-06S			
						D813	8-719-901-58	DIODE RGP15JPKG23			
						D814	8-719-300-65	DIODE ESIF			

The components identified by shading and mark are critical for safety.
Replace only with part number specified.



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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R573	1-249-411-11	CARBON	330 5% 1/4W	R844	1-215-898-11	METAL OXIDE	10K 5% 2W F
R574	1-249-417-11	CARBON	1K 5% 1/4W	R846	1-247-727-11	CARBON	10 5% 1/2W
R575	1-249-417-11	CARBON	1K 5% 1/4W	R847	1-215-868-00	METAL OXIDE	680 5% 1W F
R576	1-249-440-11	CARBON	82K 5% 1/4W	R848	1-216-449-11	METAL OXIDE	56 5% 2W F
R577	1-249-423-11	CARBON	3.3K 5% 1/4W	R849	1-216-450-00	METAL OXIDE	82 5% 2W F
R578	1-249-433-11	CARBON	22K 5% 1/4W	R850	1-216-450-00	METAL OXIDE	82 5% 2W F
R579	1-249-433-11	CARBON	22K 5% 1/4W	R851	1-216-357-00	METAL OXIDE	4.7 5% 2W F
R580	1-249-430-11	CARBON	12K 5% 1/4W	R852	1-215-904-11	METAL OXIDE	100K 5% 2W F
R581	1-215-449-00	METAL	15K 1% 1/6W	R853	1-249-397-11	CARBON	22 5% 1/4W
R582	1-214-757-00	METAL	15K 1% 1/4W	R854	1-249-441-11	CARBON	100K 5% 1/4W
R583	1-215-421-00	METAL	1K 1% 1/6W	R855	1-214-925-00	CARBON	330K 5% 1/2W
R584	1-249-405-11	CARBON	100 5% 1/4W	R856	1-247-725-11	CARBON	10K 5% 1/4W
R585	1-249-419-11	CARBON	1.5K 5% 1/4W	R857	1-249-419-11	CARBON	1.5K 5% 1/4W
R586	1-249-428-11	CARBON	8.2K 5% 1/4W	R858	1-247-891-00	CARBON	330K 5% 1/4W
R587	1-249-429-11	CARBON	10K 5% 1/4W	R861	1-247-887-00	CARBON	220K 5% 1/4W
R588	1-249-427-11	CARBON	6.8K 5% 1/4W	R862	1-249-436-11	CARBON	39K 5% 1/4W
R589	1-249-429-11	CARBON	10K 5% 1/4W	R863	1-247-889-00	CARBON	270K 5% 1/4W
R590	1-249-417-11	CARBON	1K 5% 1/4W	R864	1-212-952-00	FUSIBLE	5.6 5% 1/2W F
R591	1-249-417-11	CARBON	1K 5% 1/4W	R865	1-215-881-11	METAL OXIDE	15 5% 2W F
R592	1-249-440-11	CARBON	82K 5% 1/4W	R867	1-249-411-11	CARBON	330 5% 1/4W
R593	1-249-429-11	CARBON	10K 5% 1/4W	R868	1-249-423-11	CARBON	3.3K 5% 1/4W
R594	1-249-429-11	CARBON	10K 5% 1/4W	R869	1-249-411-11	CARBON	330 5% 1/4W
R595	1-249-427-11	CARBON	6.8K 5% 1/4W	R870	1-215-906-11	METAL OXIDE	15 5% 3W F
R596	1-249-423-11	CARBON	3.3K 5% 1/4W	R5001	1-249-429-11	CARBON	10K 5% 1/4W
R597	1-249-423-11	CARBON	3.3K 5% 1/4W	R5003	1-249-421-11	CARBON	2.2K 5% 1/4W
R598	1-249-441-11	CARBON	100K 5% 1/4W	R5006	1-249-429-11	CARBON	10K 5% 1/4W
R599	1-249-433-11	CARBON	22K 5% 1/4W	R5010	1-215-894-11	METAL OXIDE	2.2K 5% 2W F
R801	1-249-417-11	CARBON	1K 5% 1/4W				
R802	1-249-429-11	CARBON	10K 5% 1/4W				
R803	1-249-428-11	CARBON	8.2K 5% 1/4W				
<VARIABLE RESISTOR>							
R804	1-249-434-11	CARBON	27K 5% 1/4W	RV501	1-230-504-11	RES, ADJ, CARBON	220
R805	1-249-441-11	CARBON	100K 5% 1/4W	RV502	1-228-994-00	RES, ADJ, CARBON	10K
R806	1-249-417-11	CARBON	1K 5% 1/4W	RV503	1-228-995-00	RES, ADJ, CARBON	22K
R807	1-249-435-11	CARBON	33K 5% 1/4W	RV504	1-226-702-00	RES, ADJ, METAL GLAZE	2.2K
R808	1-249-433-11	CARBON	22K 5% 1/4W	RV505	1-228-994-00	RES, ADJ, METAL GLAZE	10K
R809	1-249-431-11	CARBON	15K 5% 1/4W	RV506	1-228-991-00	RES, ADJ, CARBON	2.2K
R810	1-249-425-11	CARBON	4.7K 5% 1/4W	RV507	1-228-991-00	RES, ADJ, CARBON	2.2K
R811	1-249-421-11	CARBON	2.2K 5% 1/4W	RV801	1-228-991-00	RES, ADJ, CARBON	2.2K
R812	1-249-432-11	CARBON	18K 5% 1/4W	RV802	1-228-999-00	RES, ADJ, CARBON	470K
R813	1-247-883-00	CARBON	150K 5% 1/4W	RV803	1-228-999-00	RES, ADJ, CARBON	470K
R815	1-249-440-11	CARBON	82K 5% 1/4W	RV804	1-228-994-00	RES, ADJ, CARBON	10K
R816	1-249-433-11	CARBON	22K 5% 1/4W	RV805	1-228-995-00	RES, ADJ, CARBON	22K
R817	1-249-417-11	CARBON	1K 5% 1/4W				
R819	1-249-439-11	CARBON	68K 5% 1/4W				
R820	1-249-439-11	CARBON	68K 5% 1/4W				
<SPARK GAP>							
R822	1-249-429-11	CARBON	10K 5% 1/4W	SG801	1-519-063-XX	DISCHARGING GAP	
R823	1-215-917-11	METAL OXIDE	1K 5% 3W F				
R824	1-249-417-11	CARBON	1K 5% 1/4W				
R825	1-215-900-11	METAL OXIDE	22K 5% 2W F				
R826	1-249-426-11	CARBON	5.6K 5% 1/4W				
<TRANSFORMER>							
R827	1-249-429-11	CARBON	10K 5% 1/4W	T801	1-437-090-00	HDT	
R828	1-249-441-11	CARBON	100K 5% 1/4W	T804	1-413-059-00	TRANSFORMER, FERRITE (DFT)	
R829	1-249-426-11	CARBON	5.6K 5% 1/4W				
R830	1-249-429-11	CARBON	10K 5% 1/4W				
R831	1-247-895-00	CARBON	470K 5% 1/4W				
R834	1-249-496-11	CARBON	100K 5% 1/2W				
R835	1-249-470-11	CARBON	0.47 5% 1/2W F				
R836	1-216-345-11	METAL OXIDE	0.47 5% 1W F				
R837	1-215-905-11	METAL OXIDE	10 5% 3W F				
R838	1-216-434-11	METAL OXIDE	1.8K 5% 1W F				
R839	1-247-761-11	CARBON	5.6K 5% 1/2W				
R841	1-215-920-11	METAL OXIDE	3.3K 5% 3W F				
R842	1-215-920-11	METAL OXIDE	3.3K 5% 3W F				
R843	1-215-917-11	METAL OXIDE	1K 5% 3W F				
<CAPACITOR>							
***** *A-1347-031-A V BOARD, COMPLETE *****							
***** *4-380-698-01 CASE (MAIN), SHIELD, A1 *****							
***** *4-380-699-01 CASE (UPPER LID), SHIELD, A1 *****							
***** *4-382-701-01 CASE (BOTTOM LID), SHIELD, A2 *****							

The components identified by shading and mark **A** are critical for safety.
Replace only with part number specified.

V

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C02	1-124-120-11	ELECT	220MF	20%	16V		
C03	1-124-119-00	ELECT	330MF	20%	16V		
C05	1-126-101-11	ELECT	100MF	20%	16V		
C06	1-124-120-11	ELECT	220MF	20%	16V		
C07	1-124-499-11	ELECT	1MF	20%	50V		
C08	1-163-097-00	CERAMIC CHIP	15PF	5%	50V		
C09	1-163-141-00	CERAMIC CHIP	0.001MF	10%	50V		
C10	1-163-133-00	CERAMIC CHIP	470PF	5%	50V		
C11	1-163-037-11	CERAMIC CHIP	0.022MF	10%	25V		
C12	1-163-127-00	CERAMIC CHIP	270PF	5%	50V		
C13	1-163-117-00	CERAMIC CHIP	100PF	5%	50V		
C14	1-163-097-00	CERAMIC CHIP	15PF	5%	50V		
C15	1-163-103-00	CERAMIC CHIP	27PF	5%	50V		
C16	1-163-021-00	CERAMIC CHIP	0.01MF	10%	50V		
C17	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V		
C18	1-163-099-00	CERAMIC CHIP	18PF	5%	50V		
C19	1-163-809-11	CERAMIC CHIP	0.047MF	10%	25V		
C20	1-163-125-00	CERAMIC CHIP	220PF	5%	50V		
C21	1-163-833-00	CERAMIC CHIP	0.068MF	25V			
C24	1-126-101-11	ELECT	100MF	20%	16V		
C25	1-124-477-11	ELECT	47MF	20%	16V		
C27	1-163-129-00	CERAMIC CHIP	330PF	5%	50V		
C28	1-163-137-00	CERAMIC CHIP	680PF	10%	50V		
C29	1-124-927-11	ELECT	4.7MF	20%	50V		
C51	1-163-038-00	CERAMIC CHIP	0.1MF	25V			
C52	1-163-038-00	CERAMIC CHIP	0.1MF	25V			
C53	1-163-038-00	CERAMIC CHIP	0.1MF	25V			
C54	1-163-038-00	CERAMIC CHIP	0.1MF	25V			
C55	1-163-038-00	CERAMIC CHIP	0.1MF	25V			
C56	1-163-038-00	CERAMIC CHIP	0.1MF	25V			
C57	1-163-141-00	CERAMIC CHIP	0.001MF	10%	50V		
C58	1-163-141-00	CERAMIC CHIP	0.001MF	10%	50V		
C59	1-163-141-00	CERAMIC CHIP	0.001MF	10%	50V		
<CONNECTOR>							
CNV01	*1-565-393-11	CONNECTOR, BOARD TO BOARD			R15	1-216-121-00	METAL GLAZE
CNV02	*1-565-393-11	CONNECTOR, BOARD TO BOARD			R16	1-216-055-00	METAL GLAZE
CNV03	*1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P			R17	1-216-049-00	METAL GLAZE
<TRIMMER>							
CT01	1-141-392-11	CAP, VAR, TRIMMER (1 GANG)			R20	1-216-043-00	METAL GLAZE
<DIODE>							
D01	8-719-400-47	DIODE MA3056M			R31	1-218-325-11	METAL GLAZE
D02	8-719-400-95	DIODE MA3130L			R32	1-218-325-11	METAL GLAZE
D03	8-719-914-43	DIODE DAN202K			R33	1-216-023-00	METAL GLAZE
D04	8-719-420-42	DIODE MA3036H			R34	1-216-049-00	METAL GLAZE
D07	8-719-400-63	DIODE MA3068M			R37	1-216-025-00	METAL GLAZE
D08	8-719-400-63	DIODE MA3068M			R38	1-216-047-00	METAL GLAZE
D09	8-719-914-43	DIODE DAN202K			R40	1-216-065-00	METAL GLAZE
D10	8-719-914-43	DIODE DAN202K			R41	1-216-041-00	METAL GLAZE
D11	8-719-914-44	DIODE DAP202K			R43	1-216-065-00	METAL GLAZE
D12	8-719-914-44	DIODE DAP202K			R44	1-216-041-00	METAL GLAZE
<IC>							
IC1	8-759-972-41	IC MAB8461P-W136			R45	1-216-049-00	METAL GLAZE
IC2	8-759-972-96	IC SAA5231-V6			R46	1-216-311-00	METAL GLAZE
IC3	8-759-946-85	IC SAA5243E			R51	1-216-065-00	METAL GLAZE
IC4	8-759-230-68	IC TMM2063P-70			R52	1-216-065-00	METAL GLAZE
					R53	1-216-065-00	METAL GLAZE
					R54	1-216-065-00	METAL GLAZE
					R55	1-216-057-00	METAL GLAZE
					R56	1-216-065-00	METAL GLAZE

V **H** **J2** **J1**

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R57	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W				
R58	1-216-049-00	METAL GLAZE	1K 5% 1/10W				
R59	1-216-056-00	METAL GLAZE	2K 5% 1/10W				
R60	1-216-063-00	METAL GLAZE	3.9K 5% 1/10W				
R61	1-216-071-00	METAL GLAZE	8.2K 5% 1/10W				
R62	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W				
R63	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W				
R64	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W				
R65	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W				
R66	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W				
R67	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W				
R68	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W				
R69	1-216-065-00	METAL GLAZE	4.7K 5% 1/10W				
<RESISTOR>							
R1499	1-507-806-00	JACK					

R1498	1-247-708-11	CARBON					
R1499	1-247-708-11	CARBON					

*A-1388-080-A J1 BOARD, COMPLETE							

<CAPACITOR>							
<VARIABLE RESISTOR>							
RV01	1-238-009-11	RES, ADJ, CARBON 220		C202	1-124-902-00	ELECT	0.47MF 20% 50V
<CRYSTAL>							
X01	1-567-162-21	OSCILLATOR, CRYSTAL		C203	1-124-477-11	ELECT	47MF 20% 16V
X02	1-567-495-21	OSCILLATOR, CRYSTAL		C204	1-124-902-00	ELECT	0.47MF 20% 50V
X03	1-577-082-11	VIBRATOR, CERAMIC		C206	1-124-477-11	ELECT	47MF 20% 16V

*1-627-728-11	H BOARD			C208	1-102-110-00	CERAMIC	220PF 10% 50V

*4-390-706-01	HOLDER, LED			C213	1-126-233-11	ELECT	22MF 20% 50V
<CONNECTOR>							
CNH01	*1-564-523-11	PLUG, CONNECTOR 8P		C214	1-130-481-00	MYLAR	0.0068MF 10% 50V
CNH02	*1-564-520-11	PLUG, CONNECTOR 5P		C216	1-102-110-00	CERAMIC	220PF 10% 50V

<DIODE>							
D1001	8-719-800-94	DIODE TLUR144		C217	1-124-902-00	ELECT	0.47MF 20% 50V
D1002	8-719-812-41	DIODE TLR124		C218	1-136-157-00	MYLAR	0.022MF 10% 50V
D1003	8-719-812-41	DIODE TLR124		C219	1-136-157-00	MYLAR	0.022MF 10% 50V
D1004	8-719-812-41	DIODE TLR124		C220	1-130-477-00	MYLAR	0.0033MF 10% 50V
D1005	8-719-812-41	DIODE TLR124		C221	1-130-477-00	MYLAR	0.0033MF 10% 50V

<IC>							
IC1001	8-749-900-36	IC BX-1393		C222	1-136-157-00	MYLAR	0.022MF 10% 50V
<SWITCH>							
S1001	1-554-937-11	SWITCH, KEY BOARD		C223	1-102-114-00	CERAMIC	470PF 10% 50V
S1002	1-554-937-11	SWITCH, KEY BOARD		C224	1-136-153-00	MYLAR	0.01MF 10% 50V
S1003	1-554-937-11	SWITCH, KEY BOARD		C225	1-136-173-00	FILM	0.47MF 5% 50V
S1004	1-554-937-11	SWITCH, KEY BOARD		C226	1-136-173-00	FILM	0.47MF 5% 50V
S1005	1-554-937-11	SWITCH, KEY BOARD		C227	1-136-157-00	MYLAR	0.022MF 10% 50V

*1-627-736-11	J2 BOARD			C228	1-136-159-00	MYLAR	0.033MF 10% 50V

<CONNECTOR>							
CNJ23	*1-564-523-11	PLUG, CONNECTOR 8P		C229	1-136-155-00	MYLAR	0.015MF 10% 50V
<JACK>							
<RESISTOR>							
C1401	1-101-003-00	CERAMIC		C1412	1-124-477-11	ELECT	47MF 20% 16V
C1402	1-124-902-00	ELECT		C1413	1-124-477-11	ELECT	47MF 20% 16V
C1403	1-126-103-11	ELECT		C1414	1-123-875-11	ELECT	10MF 20% 50V
C1404	1-124-902-00	ELECT		C1415	1-124-902-00	ELECT	0.47MF 20% 50V

C1416	1-124-902-00	ELECT		C1417	1-124-477-11	ELECT	47MF 20% 16V
C1418	1-102-114-00	CERAMIC		C1418	1-102-114-00	CERAMIC	470PF 10% 50V
C1419	1-102-114-00	CERAMIC		C1419	1-102-114-00	CERAMIC	470PF 10% 50V
C1421	1-124-477-11	ELECT		C1421	1-124-477-11	ELECT	47MF 20% 16V
C1423	1-136-157-00	MYLAR		C1423	1-136-157-00	MYLAR	0.022MF 10% 50V

J1

REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
C1424	1-136-157-00	MYLAR	0.022MF	10%	50V	R207	1-249-423-11	CARBON	3.3K	5%	1/4W
C1425	1-124-902-00	ELECT	0.47MF	20%	50V	R208	1-249-431-11	CARBON	15K	5%	1/4W
C1426	1-124-902-00	ELECT	0.47MF	20%	50V	R209	1-249-433-11	CARBON	22K	5%	1/4W
C1427	1-101-003-00	CERAMIC	0.0047MF		50V	R210	1-249-431-11	CARBON	15K	5%	1/4W
C1428	1-101-003-00	CERAMIC	0.0047MF		50V	R211	1-249-441-11	CARBON	100K	5%	1/4W
C1429	1-102-125-00	CERAMIC	0.0047MF	10%	50V	R212	1-249-433-11	CARBON	22K	5%	1/4W
C1430	1-102-114-00	CERAMIC	470PF	10%	50V	R213	1-249-431-11	CARBON	15K	5%	1/4W
C1431	1-124-902-00	ELECT	0.47MF	20%	50V	R214	1-249-409-11	CARBON	220	5%	1/4W
C1432	1-124-902-00	ELECT	0.47MF	20%	50V	R215	1-249-433-11	CARBON	22K	5%	1/4W
C1433	1-126-101-11	ELECT	100MF	20%	16V	R216	1-249-433-11	CARBON	22K	5%	1/4W
C1450	1-123-875-11	ELECT	10MF	20%	50V	R217	1-249-431-11	CARBON	15K	5%	1/4W
<CONNECTOR>											
CNJ01	1-561-534-41	SOCKET 21P				R222	1-249-417-11	CARBON	1K	5%	1/4W
CNJ02	1-561-534-41	SOCKET 21P				R223	1-249-413-11	CARBON	470	5%	1/4W
CNJ03	*1-566-641-11	CONNECTOR, HINGE (TAB) 18P				R224	1-249-413-11	CARBON	470	5%	1/4W
CNJ04	1-536-996-11	TERMINAL BOARD, INPUT/OUTPUT				R225	1-249-393-11	CARBON	10	5%	1/4W
CNJ21	*1-566-641-11	CONNECTOR, HINGE (TAB) 18P				R226	1-249-413-11	CARBON	470	5%	1/4W
CNJ22	*1-564-517-11	PLUG, CONNECTOR 2P				R227	1-249-417-11	CARBON	1K	5%	1/4W
<DIODE>											
D201	8-719-110-14	DIODE RD9.1ES-B3				R1401	1-247-804-11	CARBON	75	5%	1/4W
D202	8-719-110-14	DIODE RD9.1ES-B3				R1402	1-247-804-11	CARBON	75	5%	1/4W
D1401	8-719-110-04	DIODE RD7.5ES-B3				R1403	1-249-437-11	CARBON	47K	5%	1/4W
D1403	8-719-110-04	DIODE RD7.5ES-B3				R1404	1-249-413-11	CARBON	470	5%	1/4W
D1404	8-719-110-04	DIODE RD7.5ES-B3				R1405	1-249-429-11	CARBON	10K	5%	1/4W
D1405	8-719-110-04	DIODE RD7.5ES-B3				R1406	1-249-427-11	CARBON	6.8K	5%	1/4W
D1406	8-719-110-04	DIODE RD7.5ES-B3				R1407	1-247-895-00	CARBON	470K	5%	1/4W
D1407	8-719-110-04	DIODE RD7.5ES-B3				R1408	1-249-434-11	CARBON	27K	5%	1/4W
D1408	8-719-110-14	DIODE RD9.1ES-B3				R1409	1-249-413-11	CARBON	470	5%	1/4W
D1409	8-719-110-04	DIODE RD7.5ES-B3				R1410	1-249-434-11	CARBON	27K	5%	1/4W
D1418	8-719-110-04	DIODE RD7.5ES-B3				R1411	1-249-413-11	CARBON	470	5%	1/4W
D1419	8-719-110-04	DIODE RD7.5ES-B3				R1412	1-249-437-11	CARBON	47K	5%	1/4W
D1421	8-719-110-04	DIODE RD7.5ES-B3				R1413	1-247-895-00	CARBON	470K	5%	1/4W
D1422	8-719-110-04	DIODE RD7.5ES-B3				R1414	1-249-437-11	CARBON	47K	5%	1/4W
D1423	8-719-110-04	DIODE RD7.5ES-B3				R1415	1-249-434-11	CARBON	27K	5%	1/4W
D1425	8-719-110-04	DIODE RD7.5ES-B3				R1416	1-249-434-11	CARBON	27K	5%	1/4W
<IC>											
IC201	8-759-013-17	IC TDA6200				R1417	1-247-804-11	CARBON	75	5%	1/4W
IC1401	8-752-032-27	IC CXA1114P				R1418	1-247-738-11	CARBON	82	5%	1/2W
IC1402	8-759-946-32	IC TEA2014A				R1419	1-249-409-11	CARBON	220	5%	1/4W
<COIL>											
L1401	1-459-407-00	COIL, FERRITE CHOKE				R1420	1-249-409-11	CARBON	220	5%	1/4W
L1402	1-459-407-00	COIL, FERRITE CHOKE				R1421	1-249-409-11	CARBON	220	5%	1/4W
<TRANSISTOR>											
Q201	8-729-117-54	TRANSISTOR 2SA1175				R1422	1-249-409-11	CARBON	220	5%	1/4W
Q202	8-729-117-54	TRANSISTOR 2SA1175				R1423	1-249-434-11	CARBON	27K	5%	1/4W
Q1401	8-729-117-54	TRANSISTOR 2SA1175				R1424	1-249-434-11	CARBON	27K	5%	1/4W
Q1402	8-729-117-54	TRANSISTOR 2SA1175				R1425	1-249-409-11	CARBON	220	5%	1/4W
Q1405	8-729-117-54	TRANSISTOR 2SA1175				R1426	1-249-416-11	CARBON	820	5%	1/4W
<RESISTOR>											
R201	1-249-437-11	CARBON	47K	5%	1/4W	R1427	1-249-416-11	CARBON	820	5%	1/4W
R202	1-249-425-11	CARBON	4.7K	5%	1/4W	R1428	1-247-895-00	CARBON	470K	5%	1/4W
R204	1-249-435-11	CARBON	33K	5%	1/4W	R1429	1-247-895-00	CARBON	470K	5%	1/4W
R205	1-249-435-11	CARBON	33K	5%	1/4W	R1430	1-247-804-11	CARBON	75	5%	1/4W
R206	1-249-423-11	CARBON	3.3K	5%	1/4W	R1433	1-249-405-11	CARBON	100	5%	1/4W
F											
R1442											
R1443											
R1445											
R1447											

The components identified by shading and mark  are critical for safety.
Replace only with part number specified.

J1 G

REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
R1448	1-249-409-11	CARBON	220	5%	1/4W	<MODULE>					
R1449	1-247-804-11	CARBON	75	5%	1/4W				IC601 1-236-237-11 PQWER MODULE (DM-38)		
R1450	1-247-804-11	CARBON	75	5%	1/4W	<COIL>					
R1451	1-247-804-11	CARBON	75	5%	1/4W				L603 1-408-300-00 INDUCTOR MICRO 6.8UH		
R1455	1-247-804-11	CARBON	75	5%	1/4W				L604 1-421-329-00 COIL, CHOKE		
R1456	1-249-409-11	CARBON	220	5%	1/4W				L605 1-410-397-21 FERRITE BEAD INDUCTOR 1.1UH		
R1457	1-249-409-11	CARBON	220	5%	1/4W				L606 1-407-365-00 COIL, CHOKE		
R1459	1-249-413-11	CARBON	470	5%	1/4W				L607 1-410-397-21 FERRITE BEAD INDUCTOR 1.1UH		

1-413-380-11 G BOARD (ZD-109)			*****			L609 1-410-397-21 FERRITE BEAD INDUCTOR 1.1UH					
<CAPACITOR>											
C601	1-136-721-21	METALIZED FILM 1.5MF	10%	400V		L610 1-410-397-21 FERRITE BEAD INDUCTOR 1.1UH					
C602	1-136-618-11	FILM 0.047MF	5%	1.25KV		L613 1-410-397-21 FERRITE BEAD INDUCTOR 1.1UH					
C603	1-136-618-11	FILM 0.047MF	5%	1.25KV		L615 1-459-155-00 COIL (WITH CORE) 45UH					
C604	1-130-325-51	PP FILM 0.15MF	5%	100V		L616 1-459-155-00 COIL (WITH CORE) 45UH					
C605	1-130-325-51	PP FILM 0.15MF	5%	100V		<TRANSISTOR>					
C606	1-164-143-91	CERAMIC 1000PF	10%	1KV		Q601 8-729-905-73 TRANSISTOR 2SC4056R					
C607	1-164-143-91	CERAMIC 1000PF	10%	1KV		Q602 8-729-905-73 TRANSISTOR 2SC4056R					
C608	1-164-143-91	CERAMIC 1000PF	10%	1KV		Q603 8-729-178-54 TRANSISTOR 2SC2785					
C609	1-164-144-91	CERAMIC 1500PF	10%	1KV		Q604 8-729-178-54 TRANSISTOR 2SC2785					
C610	1-164-143-91	CERAMIC 1000PF	10%	1KV		<RESISTOR>					
C611	1-102-038-00	CERAMIC 1000PF	500V			R601 1-215-904-11 METAL OXIDE FILM 100K 5% 2W					
C612	1-108-843-11	PF TEREPHTHALATE 0.033MF	10%	50V		R602 1-215-904-11 METAL OXIDE FILM 100K 5% 2W					
C613	1-124-477-11	ELECT 47MF	20%	16V		R605 1-207-451-00 RES, WIRE 10 10% 1/2W					
C614	1-126-176-11	ELECT 220MF	20%	6.3V		R606 1-207-451-00 RES, WIRE 10 10% 1/2W					
C615	1-123-380-00	ELECT 1MF	20%	50V		R607 1-216-370-11 METAL OXIDE FILM 1.2 5% 2W					
C616	1-124-557-11	ELECT 1000MF	20%	25V		R608 1-216-370-11 METAL OXIDE FILM 1.2 5% 2W					
C618	1-124-439-51	ELECT 2700MF	20%	25V		R609 1-249-405-11 CARBON(SMALL) 100 5% 1/4W					
C619	1-124-557-11	ELECT 1000MF	20%	25V		R610 1-249-405-11 CARBON(SMALL) 100 5% 1/4W					
C620	1-124-568-00	ELECT 4700MF	20%	10V		R611 1-249-417-11 CARBON 1K 5% 1/4W					
C621	1-124-347-00	ELECT 100MF	20%	160V		R612 1-249-382-11 CARBON(SMALL) 1.2 5% 1/4W					
C622	1-108-843-11	PF TEREPHTHALATE 0.033MF	10%	50V		R613 1-249-398-11 CARBON(SMALL) 27 5% 1/4W					
C623	1-162-115-00	CERAMIC 330PF	10%	2KV		R614 1-249-405-11 CARBON(SMALL) 100 5% 1/4W					
C624	1-124-471-00	ELECT 1000MF	20%	6.3V		R615 1-216-363-00 METAL OXIDE FILM 0.33 5% 2W					
<DIODE>											
D601	8-719-500-69	DIODE S3V10SS				R616 1-216-363-00 METAL OXIDE FILM 0.33 5% 2W					
D602	8-719-500-69	DIODE S3V10SS				R617 1-216-343-00 RES, WIRE 33 10% 1/2W					
D603	8-719-500-26	DIODE D5KD20H				R618 1-207-451-00 RES, WIRE 10 10% 1/2W					
D605	8-719-510-13	DIODE D10SC4MR				R619 1-249-417-11 CARBON 1K 5% 1/4W					
D606	8-719-510-12	DIODE D10SC4M				R620 1-249-407-11 CARBON(SMALL) 150 5% 1/4W					
D607	8-719-300-33	DIODE RU2M				R621 1-249-405-11 CARBON(SMALL) 100 5% 1/4W					
D608	8-719-300-33	DIODE RU2M				<TRANSFORMER>					
D609	8-719-500-67	DIODE D5KC40H				T601 1-424-023-11 TRANSFORMER, LINE FILTER					
D610	8-719-911-19	DIODE ISS119				T602 Δ 1-424-147-11 TRANSFORMER, POWER REGULATION					
D611	8-719-911-19	DIODE ISS119				T603 Δ 1-424-169-11 TRANSFORMER, POWER INSULATED					

D612	8-719-911-19	DIODE ISS119				MISCELLANEOUS					
D613	8-719-911-19	DIODE ISS119				*****					
D614	8-719-911-19	DIODE ISS119				Δ 1-413-380-11 REGULATOR, SWITCHING (ZD-109)					
D615	8-719-981-00	DIODE ERB81-004				Δ 1-230-940-31 RESISTOR ASSY, HIGH-VOLTAGE					
D616	8-719-911-55	DIODE U05G				Δ 1-238-368-11 RESISTOR ASSY, HIGH-VOLTAGE					
<CONNECTOR>						T805 Δ 1-439-443-11 TRANSFORMER ASSY, FLYBACK					
G1	*1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P				Δ 1-452-509-31 NECK ASSY, PICTURE TUBE (NA-308)					
G2	*1-508-767-00	PIN, CONNECTOR (5MM PITCH) 5P				Δ 1-451-333-11 DEFLECTION YOKE (SY-191B)					
G3	*1-564-507-11	PLUG, CONNECTOR 4P				1-452-032-00 MAGNET DISK, 10MM 4					
G4	*1-564-506-11	PLUG, CONNECTOR 3P									

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REF. NO.	PART NO.	DESCRIPTION	REMARK
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1-452-094-00 MAGNET, ROTATABLE DISK; 15MM ϕ
 Δ 1-574-299-11 CORD, POWER (WITH CONNECTOR)

L901 Δ 1-426-398-11 COIL, DEMAGNETIZATION
Y901 Δ 8-733-821-05 PICTURE TUBE (A68JYK10X)

ACCESSORIES AND PACKING MATERIALS

PART NO.	DESCRIPTION	REMARK
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A-1470-859-A COMMANDER ASSY (RM-681)
1-574-071-11 CORD (WITH PLUG)
3-786-575-11 MANUAL, INSTRUCTION
 $*4$ -380-432-01 BAG, PROTECTION
 $*4$ -390-743-01 CUSHION (UPPER) (ASSY)
 $*4$ -390-744-01 CUSHION (LOWER) (ASSY)
 $*4$ -390-749-01 INDIVIDUAL CARTON